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GENERAL ASSEMBLY OF NORTH CAROLINA
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SENATE BILL DRS15282-RIa-28

Short Title:	Water Safety Act.	(Public)
Sponsors:	Senators Lee, Rabon, and Meredith (Primary Sponsors).	
Referred to:		

A BILL TO BE ENTITLED
AN ACT TO IMPLEMENT MEASURES TO ADDRESS PER- AND POLY-FLUOROALKYL SUBSTANCES, INCLUDING GENX, AND OTHER EMERGING CONTAMINANTS.
The General Assembly of North Carolina enacts:

AUTHORIZE THE GOVERNOR, UNDER CERTAIN CIRCUMSTANCES, TO REQUIRE A FACILITY TO CEASE ALL OPERATIONS AND ACTIVITIES THAT RESULT IN THE PRODUCTION OF A POLLUTANT

SECTION 1.(a) G.S. 143-215.3 reads as rewritten:

"**§ 143-215.3. General powers of ~~Commission and Department;~~<u>Commission, Department, and Governor;</u> auxiliary powers.**

…

<u>(g) The Governor is authorized to require a facility to cease all operations and activities in the State that result in the production of a pollutant if all of the following circumstances exist:</u>

<u>(1) The facility has a National Pollutant Discharge Elimination System (NPDES) permit.</u>

<u>(2) The facility has received more than one notice of violation from the Department within a two-year period.</u>

<u>(3) The Department has determined that the facility has had unauthorized discharges of per- and poly-fluoroalkyl substances (PFAS) into the air, surface water, and groundwater and these discharges have resulted in the violation of federal drinking water standards or health goals established by the North Carolina Department of Health and Human Services.</u>

<u>(4) The Department has been unable to stop all further unauthorized discharges from the facility that may result in the violation of federal drinking water standards or health goals established by the North Carolina Department of Health and Human Services within one year from the time the Department first learned of the unauthorized discharges.</u>"

SECTION 1.(b) This section is effective when it becomes law and expires December 31, 2020.

REQUIRE ESTABLISHMENT OF PERMANENT REPLACEMENT WATER SUPPLIES FOR HOUSEHOLDS WITH DRINKING WATER WELLS CONTAMINATED BY PER- AND POLY-FLUOROALKYL SUBSTANCES

SECTION 2.(a) Article 21 of Chapter 143 of the General Statutes is amended by adding a new section to read:

"**§ 143-215.2A. Relief for contaminated private drinking water wells.**

(a) The Secretary shall, upon direction of the Governor, order any person who the Secretary finds responsible for the discharge of industrial waste that includes per- and poly-fluoroalkyl substances (PFAS), including the chemical known as "GenX" (CAS registry number 62037-80-3 or 13252-13-6), into the air, groundwater, surface water, or onto the land that results in contamination of a private drinking water well, as that term is defined in G.S. 87-85, to establish permanent replacement water supplies for each household with such a well. For purposes of this section, the term "contamination" means an exceedance of a health goal established by the Department of Health and Human Services or an exceedance of a health advisory standard established by the United States Environmental Protection Agency, for any chemical classified as a PFAS.

(b) If the Secretary orders a person responsible for the discharge of a PFAS that results in contamination of a private drinking water well to establish a permanent replacement water supply for a household with such a well pursuant to subsection (a) of this section, the replacement water supply shall be established by connection to a public water supply, except that an affected household may elect to receive a whole house filtration system in lieu of a connection to public water supply, in which case the person responsible shall install a filtration system. For households for which filtration systems are installed, the person responsible shall be liable for any periodic required maintenance of the filtration system. An order issued by the Secretary pursuant to subsection (a) of this section shall include a deadline by which the responsible person must establish the permanent replacement water supply for the household or households subject to the order.

(c) An order issued by the Secretary pursuant to subsection (a) of this section shall be delivered by registered or certified mail, or by any means authorized by G.S. 1A-1, Rule 4, to the person ordered to establish the permanent replacement water supply and shall include detailed findings of fact and conclusions in support of the order. A person to whom such order is issued may commence a contested case by filing a petition under G.S. 150B-23 within 30 days after receipt of notice of the order. If the person does not file a petition within the required time, the Secretary's decision is final and is not subject to review.

(d) A person required to establish a permanent replacement water supply pursuant to this section shall be jointly and severally liable for all costs associated with establishment of the permanent replacement water supply. The remedy under this section is in addition to those provided by existing statutory and common law.

(e) Nothing in this section shall be construed to (i) require an eligible household to connect to a public water supply or receive a filtration system or (ii) obviate the need for other federal, State, and local permits and approvals.

(f) All State entities and local governments shall expedite any permits and approvals that may be required for establishment of permanent replacement water supplies ordered pursuant to this section."

SECTION 2.(b) In order to ensure the expeditious establishment of alternative permanent water supplies for each household that has a private drinking water well with contamination from the discharge of industrial waste that includes PFAS, in accordance with the requirements of G.S. 143-215.2A, the sum of two million dollars ($2,000,000) in nonrecurring funds for the 2017-2018 fiscal year is appropriated from the unappropriated balance remaining in the General Fund to the Division of Water Infrastructure of the Department of Environmental Quality to provide funding to local governments for necessary expenditures that local governments may incur as a result of activities to connect such households to public water supplies pursuant to an order issued under G.S. 143-215.2A. The funds appropriated herein shall be deposited into the PFAS Recovery Fund, which shall be established within the Department. Funds appropriated by this section shall not revert but shall remain available for nonrecurring expenses. The Department may distribute funds to local governments solely for the purposes of

planning and analysis and surveying of waterline extensions for households subject to an order issued pursuant to G.S. 143-215.2A. No later than 30 days after completion of a local government's activities to connect a household to a public water supply pursuant to G.S. 143-215.2A, the Secretary shall deliver a statement of all funds paid from the PFAS Recovery Fund to the local government and the costs expended by the local government for such activities and issue an order demanding reimbursement from the person responsible to whom an order was issued under G.S. 143-215.2A. The statement shall be delivered by registered or certified mail, or by any means authorized by G.S. 1A-1, Rule 4, to the responsible person. If the responsible person refuses to pay the sum identified, or fails to pay such sum within the time specified in the order, the Secretary shall bring an action for reimbursement of the PFAS Recovery Fund in the name of the State in the superior court of the county in which the funds were expended to recover such sum and the cost of bringing the action. Funds appropriated by this section shall not revert but shall continue to be available. The Department shall report on activities conducted and funds expended pursuant to this section on a quarterly basis to the Environmental Review Commission beginning September 1, 2018.

FUNDS TO THE CAPE FEAR PUBLIC UTILITY AUTHORITY FOR WATER QUALITY SAMPLING, AND TESTING OF TREATMENT TECHNIQUES, TO ADDRESS PER- AND POLY-FLUOROALKYL SUBSTANCES, INCLUDING GENX, AND OTHER CONTAMINANTS

SECTION 3. The sum of four hundred fifty thousand dollars ($450,000) in nonrecurring funds for the 2018-2019 fiscal year is appropriated from the unappropriated balance remaining in the General Fund to the Division of Water Resources of the Department of Environmental Quality for grants to be allocated to the Cape Fear Public Utility Authority to implement a program to:

(1) Perform nontargeted sampling of finished drinking water from the Authority's Sweeney Water Treatment Plant and in its Aquifer Storage and Recovery Well (ASR) to identify levels of per- and poly-fluoroalkyl substances ("PFAS"), including the chemical known as "GenX" (CAS registry number 62037-80-3 or 13252-13-6), that may be included in the water and identify whether and to what degree other contaminants may be present, including 1,4-dioxane, total organic halogens, and proxies of wastewater contaminants (including sucralose and pharmaceuticals) in water samples.

(2) After establishing the baseline pursuant to testing conducted pursuant to subdivision (1) of this section, the Authority shall test the effectiveness of ion exchange and activated carbon technologies for treatment of PFAS and any other contaminants that may be identified in the baseline testing. In so doing, the Authority shall (i) install temporary ion exchange and carbon treatment systems suitable to treat 500 gallons per minute (GPM) flow as a minimum capacity and modify existing piping from the Plant and ASR to connect to the temporary treatment systems; (ii) after installation of the temporary treatment systems, test the water treated weekly, before and after treatment by ion exchange and activated carbon, over a period of six weeks at increasing flow rates to determine the relative effectiveness of the two technologies at reducing contaminants; and (iii) after determination of the most successful treatment technology at a high flow of 500 GPM, continue sampling water treated by the technology at two-week intervals thereafter.

The Authority shall submit an interim report on activities conducted pursuant to this section to the House Select Committee on North Carolina River Quality, the Senate Select Committee on North Carolina River Water Quality, and the Environmental Review Commission

no later than December 1, 2018, and a final report with sampling results and treatment data no later than June 1, 2019.

REQUIRE THE DEPARTMENT OF ENVIRONMENTAL QUALITY TO DEVELOP A PLAN FOR REMEDIATION OF GROUNDWATER AND SURFACE WATER CONTAMINATED WITH PER- AND POLY-FLUOROALKYL SUBSTANCES, INCLUDING GENX

SECTION 4.(a) The Department of Environmental Quality shall develop a plan for the remediation of groundwater and surface water for which testing has demonstrated the presence of per- and poly-fluoroalkyl substances (PFAS), including the chemical known as "GenX" (CAS registry number 62037-80-3 or 13252-13-6), from the discharge of industrial waste. The plan shall include:

(1) A process for identifying all groundwater and surface water sources for which testing has demonstrated the presence of PFAS from the discharge of industrial waste.

(2) A process for identifying all private and public drinking water supplies that (i) are currently impacted by the presence of PFAS in groundwater or surface water sources or (ii) may be expected to be impacted by the presence of PFAS in groundwater or surface water sources based upon groundwater modeling and hydrogeologic, geologic, and geotechnical investigations, and the results of other modeling or investigations that may be conducted, which provide a reasonable basis to predict that a drinking water supply may be adversely impacted by the presence of PFAS at a future date.

(3) Proposed methods for developing information on the source, known or suspected, for the PFAS present in each groundwater or surface water identified.

(4) Proposed methods for eliminating the presence of PFAS in groundwater or surface waters.

(5) A proposed schedule for implementation of plans for corrective action for groundwater or surface water contaminated with PFAS from the discharge of industrial waste by persons responsible for such discharge.

(6) A monitoring plan for evaluating the effectiveness of a proposed corrective action and detecting movement of any contaminant plumes.

(7) Any other information related to the remediation of groundwater or surface water with the presence of PFAS that the Department deems relevant.

SECTION 4.(b) The Department shall submit the plan to the Environmental Review Commission no later than January 1, 2019.

DIRECT THE DEPARTMENT OF HEALTH AND HUMAN SERVICES TO CONSULT WITH FEDERAL AGENCIES, AS WELL AS THE NORTH CAROLINA POLICY COLLABORATORY, WHICH SHALL COORDINATE RELEVANT FACULTY EXPERTISE WITHIN INSTITUTIONS OF HIGHER EDUCATION ACROSS THE STATE, ON THE PROCESS FOR THE ESTABLISHMENT OF HEALTH GOALS FOR PER- AND POLY-FLUOROALKYL SUBSTANCES, INCLUDING GENX

SECTION 5. The Department of Health and Human Services shall consult with the United States Environmental Protection Agency, the Centers for Disease Control and Prevention, the Agency for Toxic Substances and Disease Registry, as well as the North Carolina Policy Collaboratory at the University of North Carolina at Chapel Hill, which shall coordinate with faculty experts in institutions of higher education across the State, including the Universities of North Carolina at Chapel Hill and Wilmington, North Carolina State University, North Carolina A&T State University, Duke University, and other public and private institutions, on the

Department's process for the establishment of health goals for per- and poly-fluoroalkyl substances, including the chemical known as "GenX" (CAS registry number 62037-80-3 or 13252-13-6).

FUNDS TO THE DEPARTMENT OF HEALTH AND HUMAN SERVICES TO ESTABLISH A WATER HEALTH AND SAFETY UNIT

SECTION 6. The sum of five hundred thirty thousand eight hundred thirty-nine dollars ($530,839) in recurring funds for the 2018-2019 fiscal year shall be appropriated from the unappropriated balance remaining in the General Fund to the Department of Health and Human Services to establish a Water Health and Safety Unit in the Division of Public Health for the assessment of the toxicity of and impacts on human health from per- and poly-fluoroalkyl substances, including the chemical known as "GenX" (CAS registry number 62037-80-3 or 13252-13-6), and other emerging contaminants. The Unit may include a medical risk assessor, a toxicologist, an epidemiologist or informatics expert, and a health educator.

FUNDING TO ADDRESS PER- AND POLY-FLUOROALKYL SUBSTANCES, INCLUDING GENX/USE OF EXPERTISE AND TECHNOLOGY AVAILABLE IN INSTITUTIONS OF HIGHER EDUCATION LOCATED WITHIN THE STATE

SECTION 7.(a) The General Assembly finds that (i) emerging contaminants that impair drinking water quality have been detected in several of the State's watersheds, such as per- and poly-fluoroalkyl substances (PFAS), including the chemical known as "GenX" (CAS registry number 62037-80-3 or 13252-13-6); 1,4-dioxane, and bromide; and (ii) these contaminants have been discovered largely through academic research not through systematic water quality monitoring programs operated by the Department of Environmental Quality or other State or federal agencies. The General Assembly finds that the profound, extensive, and nationally recognized faculty expertise, technology, and instrumentation existing within the Universities of North Carolina at Chapel Hill and Wilmington, North Carolina State University, North Carolina A&T State University, Duke University, and other public and private institutions of higher education located throughout the State should be maximally utilized to address the occurrence of emerging contaminants in drinking water resources.

SECTION 7.(b) The North Carolina Policy Collaboratory at the University of North Carolina at Chapel Hill (NCPC) shall identify faculty expertise, technology, and instrumentation, including mass spectrometers, located within institutions of higher education in the State, including the Universities of North Carolina at Chapel Hill and Wilmington, North Carolina State University, North Carolina A&T State University, Duke University, and other public and private institutions, and coordinate these faculty and resources to conduct targeted and nontargeted analysis of emerging contaminants, including, at a minimum, measurement of targeted PFAS, including GenX, and other emerging contaminants such as 1,4-dioxane, total organic halogens, and proxies of wastewater contaminants (including sucralose and pharmaceuticals), at all public water supply surface water intakes and one public water supply well selected by each municipal water system that operates groundwater wells for public drinking water supplies as identified by the Department of Environmental Quality, to establish a water quality baseline for all sampling sites. NCPC, in consultation with the participating institutions of higher education, shall establish a protocol for the baseline testing required by this subsection, as well as a protocol for periodic retesting of the municipal intakes and additional public water supply wells. No later than July 1, 2019, NCPC shall report the results of such sampling by identifying chemical families detected at each intake to the Environmental Review Commission, the Department of Environmental Quality, the Department of Health and Human Services, and the United States Environmental Protection Agency.

SECTION 7.(c) Beginning October 1, 2018, NCPC shall report no less than quarterly to the Environmental Review Commission, the Department of Environmental Quality,

and the Department of Health and Human Services on all activities conducted pursuant to this section, including any findings and recommendations for any steps the Department of Environmental Quality, the Department of Health and Human Services, the General Assembly, or any other unit of government should take in order to address emerging contaminants.

SECTION 7.(d) The sum of eight million dollars ($8,000,000) in nonrecurring funds for the 2017-2018 fiscal year shall be appropriated from the unappropriated balance remaining in the General Fund to the Board of Governors of The University of North Carolina to be allocated to the NCPC to manage and implement the requirements of this act, which shall include distribution to the NCPC and participating institutions of higher education (i) to cover costs incurred as a result of activities conducted pursuant to this section, (ii) for acquisition or modification of essential scientific instruments, or (iii) for payments of costs for sample collection and analysis, training or hiring of research staff and other personnel, method development activities, and data management, including dissemination of relevant data to stakeholders. No overhead shall be taken from these funds from the participating institutions that receive any portion of these funds. Funds appropriated by this section shall not revert but shall remain available for nonrecurring expenses.

SECTION 7.(e) The NCPC should pursue relevant public and private funding opportunities that may be available to address the impacts of emerging contaminants on surface water and groundwater quality, as well as air quality, in order to leverage funds appropriated by this section, or any other funds provided to the NCPC, including the Challenge Grant authorized in Section 27.5 of S.L. 2016-94, as amended by Section 10.4(a) of S.L. 2017-57.

SECTION 8.(a) In the event that the United States Environmental Protection Agency no longer provides access to its analytical instrumentation at no cost to the State for water quality sampling analysis related to per- and poly-fluoroalkyl substances (PFAS), including the chemical known as "GenX" (CAS registry number 62037-80-3 or 13252-13-6), and other emerging contaminants, or if the Department of Environmental Quality determines that such analysis is not being performed in a sufficiently timely manner, NCPC shall coordinate such analysis in the most cost-effective manner using relevant faculty expertise, technology, and instrumentation, including mass spectrometers, existing throughout institutions of higher education located throughout the State, until such time as the Department of Environmental Quality is able to perform such analysis with instrumentation acquired pursuant to Section 11 of this act. NCPC, in consultation with the Department and relevant experts across institutions of higher education in the State, including the Universities of North Carolina at Chapel Hill and Wilmington, North Carolina State University, North Carolina A&T State University, Duke University, and other public and private institutions, shall establish a protocol for delivery of such samples taken by the Department to the entity designated to perform analysis of the samples, chain of custody protocols, and other matters to ensure proper handling and processing of the samples.

SECTION 8.(b) NCPC shall identify faculty expertise within institutions of higher education in the State, including the Universities of North Carolina at Chapel Hill and Wilmington, North Carolina State University, North Carolina A&T State University, Duke University, and other public and private institutions, and use technology and instrumentation existing throughout the institutions to conduct the following research (i) develop quantitative models to predict which private wells are most at risk of contamination from the discharge of GenX, and other emerging contaminants; (ii) test the performance of granular activated carbon in removing such compounds; and (iii) study the air emissions and atmospheric deposition of GenX and other emerging compounds. In addition, NCPC may, using relevant faculty expertise, technology, and instrumentation existing throughout institutions identified, evaluate other research opportunities and conduct such research for improved water quality sampling and analyses techniques, data interpretation, and potential mitigation measures that may be necessary, with respect to the discharge of GenX, and other emerging contaminants.

FUNDS TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY

SECTION 9.(a) One million three hundred thousand dollars ($1,300,000) in nonrecurring funds appropriated to the Department of Environmental Quality for the 2016-2017 fiscal year and allocated for in situ nutrient management by Section 14.13(e) of S.L. 2016-94, as amended by Section 13.24 of S.L. 2017-57, is reallocated for the purposes described in subsection (c) of this section.

SECTION 9.(b) Twenty-five thousand dollars ($25,000) in nonrecurring funds appropriated to the Rural Economic Development Division of the Department of Commerce for the 2017-2018 fiscal year and provided as a grant-in-aid to the Town of Stedman by subdivision (15) of Section 15.8(b) of S.L. 2017-57 is transferred to the Department of Environmental Quality and allocated for the purposes described in subsection (c) of this section.

SECTION 9.(c) The funds provided to the Department of Environmental Quality by subsections (a) and (b) of this section shall be allocated for the 2017-2018 fiscal year as follows:

(1) Six hundred thirteen thousand dollars ($613,000) to the Division of Water Resources for time-limited positions and operations support of water quality sampling and targeted analysis of samples related to per- and poly-fluoroalkyl substances (PFAS), including the chemical known as "GenX" (CAS registry number 62037-80-3 or 13252-13-6), and other emerging contaminants, and to purchase supplies for operation of the mass spectrometer acquired pursuant to Section 11 of this act to perform targeted analysis of water samples related to discharges of PFAS, including GenX, and other emerging contaminants.

(2) Two hundred thousand dollars ($200,000) to the Division of Water Resources for time-limited positions and operations support to address permitting backlogs.

(3) Two hundred thirty-two thousand nine hundred fifty dollars ($232,950) to the Division of Air Quality for sampling and analysis of atmospheric deposition of PFAS, including GenX, and other emerging contaminants.

(4) Two hundred seventy-nine thousand fifty dollars ($279,050) to the Division of Waste Management for sampling and analysis of PFAS, including GenX, and other emerging contaminants in groundwater wells, soil, and sediment.

SECTION 9.(d) Funds reallocated by this section shall not revert but shall remain available for nonrecurring expenses.

SECTION 10. The sum of four hundred seventy-nine thousand seven hundred thirty-six dollars ($479,736) in recurring funds for the 2017-2018 fiscal year is appropriated from the unappropriated balance remaining in the General Fund to the Department of Environmental Quality to support sampling and analysis activities in response to the statewide sampling and analysis conducted pursuant to Section 7 of this act.

SECTION 11. The sum of five hundred thirty-seven thousand dollars ($537,000) in nonrecurring funds for the 2017-2018 fiscal year is appropriated from the unappropriated balance remaining in the General Fund to the Department of Environmental Quality to support the acquisition by the Department of a triple quadrupole (QqQ) mass spectrometer to perform targeted analysis of water samples related to discharges of per- and poly-fluoroalkyl substances, including the chemical known as "GenX" (CAS registry number 62037-80-3 or 13252-13-6), and other emerging contaminants that are identified by testing conducted pursuant to Section 7 of this act. Funds appropriated by this section shall not revert but shall remain available for nonrecurring expenses.

NPDES PERMIT HOLDERS TO SUBMIT DOCUMENTATION OF POLLUTANTS IDENTIFIED AT TIME OF PERMIT APPLICATION

SECTION 12. Every person with an individual National Pollutant Discharge Elimination System (NPDES) permit issued by the Department of Environmental Quality shall,

no later than September 1, 2018, submit documentation to the Department in an electronic format as prescribed by the Department that will facilitate immediate public disclosure of the pollutants included in the person's discharge that the person identified in the application for the person's current NPDES permit. The chemical abstracts service (CAS) number shall be provided for every pollutant identified, if available. If the CAS number is unavailable, the pollutant shall otherwise be described in sufficient detail so as to adequately identify the pollutant's characteristics. The person submitting such documentation shall certify under oath that, to the best of the person's knowledge and belief, the data is complete and accurate.

EXEMPTION FROM STATUTORY PROVISION CONCERNING ORDER OF APPROPRIATIONS BILLS

SECTION 13. The provisions of G.S. 143C-5-2 do not apply to this act.

SEVERABILITY CLAUSE AND EFFECTIVE DATE

SECTION 14.(a) If any section or provision of this act is declared unconstitutional or invalid by the courts, it does not affect the validity of this act as a whole or any part other than the part declared to be unconstitutional or invalid.

SECTION 14.(b) Except as otherwise provided, this act is effective when it becomes law.