



# SENATE BILL 99: Appropriations Act of 2018, Sec. 13.1: Water Safety

2017-2018 General Assembly

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<b>Committee:</b>		<b>Date:</b>	July 10, 2018
<b>Introduced by:</b>		<b>Prepared by:</b>	Jennifer McGinnis
<b>Analysis of:</b>	Sec. 13.1 of S.L. 2018-5		Staff Attorney

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## OVERVIEW:

*Sec. 13.1 of S.L. 2018-5, as amended by Sec. 4.4 of S.L. 2018-97, provides for the following measures:*

- *Authorizes the Governor to require a facility to cease all operations and activities that result in the production of a pollutant, under certain circumstances.*
- *Requires the Secretary of Environmental Quality (Secretary), upon direction of the Governor, to order any person who the Secretary finds responsible for the discharge or release of industrial waste that includes per- and poly-fluoroalkyl substances ("PFAS"), including the chemical known as "GenX" (chemical abstracts service (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, to establish permanent replacement water supplies for each household with such a well.*
- *Establishes within the Department of Environmental Quality (DEQ) the PFAS Recovery Fund, and appropriate moneys to the Fund to provide funding to local governments for necessary expenditures that local governments may incur as a result of activities to connect households with drinking water wells contaminated with PFAS to public water supplies.*
- *Makes various appropriations to fund water quality sampling, remediation activities, and research, to address the presence of PFAS, including GenX, in drinking water resources in the State, including funds to:*
  - *The Cape Fear Public Utility Authority (Authority) for water quality sampling, and testing of treatment techniques, to address PFAS, including GenX.*
  - *The North Carolina Policy Collaboratory at The University of North Carolina at Chapel Hill (Collaboratory) for distribution to institutions of higher education in the State to perform targeted and non-targeted analysis for PFAS, including GenX, 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 DEQ, and to perform research to address such contaminants.*
  - *DEQ for:*
    - *Positions and operations support of water quality sampling and targeted analysis of samples related to PFAS, including GenX.*
    - *Addressing permitting backlogs.*
    - *Sampling and analysis of atmospheric deposition of PFAS, including GenX.*

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- *Sampling and analysis of PFAS, including GenX, in groundwater wells, soil, and sediment.*
- *Acquisition of a mass spectrometer to perform targeted analysis of water samples related to discharges of PFAS, including GenX.*
- *Requires every applicant for a new permit, or permit renewal, of an individual National Pollutant Discharge Elimination System (NPDES) permit to submit documentation to DEQ in an electronic format to facilitate immediate public disclosure of the pollutants by certified test method included in the person's discharge.*

## **SECTION 13.1 ANALYSIS:**

- Authorizes the Governor to require a facility with a NPDES permit to cease all operations and activities that result in the production of a pollutant, if DEQ has:
  - Determined that the facility has had unauthorized discharges or releases of PFAS into the air, surface water, and groundwater and these discharges or releases have resulted in an exceedance of a standard set by the Environmental Management Commission (Commission) for groundwater, surface water, or air quality, or an exceedance of a health advisory level established by the United States Environmental Protection Agency (USEPA) for any chemical classified as a PFAS, and the facility has received more than one notice of violation from DEQ within a two-year period for unauthorized discharges or releases of such substances.
  - Been unable to stop all ongoing unauthorized discharges or releases of such substances from the facility that result in the violation of a standard or health advisory level within one year from the time DEQ first learned of the unauthorized discharges or releases.
  - Determined that the best available scientific data indicates that the ongoing unauthorized discharges or releases present a danger to the public health.

In determining whether to exercise the authority established under this section, the Governor may take into account remedial actions undertaken by the operator of the facility.

The authority established by this section is in addition to, and not exclusive of, other authority given to the Commission, the Secretary, and DEQ under this Article to take enforcement action against a person for unauthorized discharges or releases of PFAS into the air, surface water, and groundwater, including the authority to institute a civil action for injunctive relief to restrain a violation or threatened violation and for other relief.

This subsection expires December 31, 2020.

- Requires the Secretary, upon direction of the Governor, to order any person who the Secretary finds responsible for the discharge or release of industrial waste that includes PFAS, including GenX, into the air, groundwater, surface water, or onto the land that results in contamination of a private drinking water well, to establish permanent replacement water supplies for each affected party (which includes a household, business, school, or public building with a well contaminated with PFAS, including GenX as a result of the discharge or release of industrial waste). The section provides that preference will be given to permanent replacement water supplies by connection to public water supplies; provided that (i) an affected party may elect to receive a filtration system in lieu of a connection to public water supplies and (ii) if DEQ determines that connection to a public

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water supply to a particular affected party would not be cost effective, DEQ must authorize provision of a permanent replacement water supply to that affected party through installation of a filtration system. For affected parties for which filtration systems are installed, the person responsible will be liable for any periodic required maintenance of the filtration system.

- Establishes the PFAS Recovery Fund within DEQ, and appropriates \$2 million to provide funding to local governments for necessary expenditures that local governments may incur as a result of activities to connect households contaminated with PFAS to public water supplies. DEQ is authorized to distribute funds to local governments solely for the purposes of planning and analysis, and surveying of waterline extensions to such households.
- Appropriates \$450,000 to the Division of Water Resources (DWR) for grants to be allocated to the Authority to implement a program to:
  - Perform non-targeted 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 PFAS, including GenX, which may be included in the water.
  - Test the effectiveness of ion exchange and activated carbon technologies, at intervals and flows specified in the bill, for treatment of PFAS and any other contaminants that may be identified in baseline testing.
- Requires the Collaboratory to 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, Duke University, and other public and private institutions, and coordinate these faculty and resources to conduct targeted and non-targeted analysis of PFAS compounds, including GenX, 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 DEQ, to establish a water quality baseline for all sampling sites.
- Appropriates \$5.013 million in nonrecurring and nonreverting funds for the 2018-2019 fiscal year to the The University of North Carolina's Board of Governors for allocation to the Collaboratory to implement the requirements of this section for distribution to participating institutions of higher education to: (i) cover costs incurred as a result of activities conducted pursuant to this section; (ii) acquisition or modification of essential scientific instruments, and (iii) payments of costs for sample collection and analysis, training of research staff and other personnel, method development activities, and data management.
- Provides that in the event that USEPA no longer provides access to its analytical instrumentation at no cost to the State for water quality sampling analysis related to PFAS, including GenX, or if DEQ determines that such analysis is not being performed in a sufficiently timely manner, the Collaboratory must 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 across the State until such time as the DEQ is able to perform such analysis with instrumentation acquired pursuant to funds appropriated to DEQ. The Collaboratory, in consultation with DEQ and relevant experts from institutions of higher education

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located throughout the State, must establish a protocol for delivery of such samples taken by DEQ 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, which protocols shall be subject to approval by the USEPA, if such approval is required pursuant to authority delegated from the USEPA to DEQ to administer federal environmental law.

- Directs the Collaboratory to identify faculty expertise within institutions of higher education located throughout the State, and use technology and instrumentation existing those institutions to conduct the following research:
  - Develop quantitative models to predict which private wells are most at risk of contamination from the discharge of PFAS, including GenX.
  - Test the performance of relevant technologies in removing such compounds.
  - Study the air emissions and atmospheric deposition of PFAS, including GenX.

The Collaboratory may, using relevant faculty expertise, technology, and instrumentation existing in institutions of higher education located throughout the State, 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 PFAS, including GenX.

- Reallocates \$1.325 million of nonrecurring funds previously appropriated in the 2016 and 2017 Appropriations Acts for in situ nutrient management by DEQ and for an unused grant from the Department of Commerce's Rural Economic Development Division. The reallocated funds are to be used for:
  - 1) \$613,000 to DWR for time-limited positions and operations support of water quality sampling and targeted analysis of samples related to PFAS, including GenX, and to purchase supplies for operation of the mass spectrometer acquired pursuant to the budget to perform targeted analysis of water samples related to discharges of PFAS, including GenX.
  - (2) \$200,000 to DWR for time-limited positions and operations support to address permitting backlogs.
  - (3) \$232,950 to the Division of Air Quality for sampling and analysis of atmospheric deposition of PFAS, including GenX.
  - (4) \$279,050 to the Division of Waste Management for sampling and analysis of PFAS, including GenX, in groundwater wells, soil, and sediment.

The funds will not revert but will remain available for nonrecurring expenses.

- Appropriates \$537,000 in nonrecurring funds for the 2017-2018 fiscal year to DEQ to support acquisition of a triple quadrupole (QqQ) mass spectrometer to perform targeted analysis of water samples related to discharges of PFAS, including GenX. The funds will not revert but will remain available for nonrecurring expenses.

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- Requires every applicant for a new permit, or permit renewal, of an individual NPDES permit to submit documentation to DEQ in an electronic format to facilitate immediate public disclosure of the pollutants by certified test method included in the person's discharge.

**EFFECTIVE DATE:** Except as otherwise provided, this section became effective June 12, 2018.