NORTH CAROLINA GENERAL ASSEMBLY



HOUSE SELECT COMMITTEE ON NORTH CAROLINA RIVER QUALITY

REPORT TO THE
2018 SESSION
of the
2017 GENERAL ASSEMBLY
OF NORTH CAROLINA

APRIL 26, 2018

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TRANSMITTAL LETTER

April 26, 2018

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TO THE MEMBERS OF THE 2018 REGULAR SESSION OF THE 2017 GENERAL ASSEMBLY

The House Select Committee on North Carolina River Quality, pursuant to G.S. 120-19.6(a1) and Rule 26(a) of the Rules of the House of Representatives of the 2017 General Assembly, respectfully submits the following report to the 2018 Regular Session of the 2017 General Assembly.

Co-Chair

Representative Tell Davis, Jr.

Senior Chair

Representative Frank Her

Co-Chair

COMMITTEE MEMBERSHIP

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2017-2018

The Committee consists of fourteen members appointed by the Speaker of the House of Representatives. The membership of the Committee shall include legislators as specified below. Members serve at the pleasure of the Speaker of the House of Representatives. The Speaker of the House of Representatives may dissolve the Committee at any time. Vacancies are filled by the Speaker of the House of Representatives. A Chair, Vice Chair, or other member of the Committee continues to serve until a successor is appointed.

Senior Chair

Representative Ted Davis

Ted.Davis@ncleg.net

Co-Chairs

Representative Holly Grange Representative Frank Iler Holly.Grange@ncleg.net Frank.Iler@ncleg.net

Legislative Members

Representative William Brisson
Representative Jimmy Dixon
Representative Elmer Floyd
Representative Kyle Hall
Representative Pricey Harrison
Representative Pat McElraft
Representative Chuck McGrady
Representative Bob Muller
Representative Bob Steinburg
Representative Scott Stone
Representative Larry Yarborough

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COMMITTEE CHARGE

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Section 1. The House Select Committee on North Carolina River Quality (hereinafter "Committee") is established by the Speaker of the House of Representatives pursuant to Rule 26(a) of the Rules of the House of Representatives of the 2017 General Assembly.

Section 2. The Committee consists of fourteen members appointed by the Speaker of the House of Representatives. The membership of the Committee shall include legislators as specified below. Members serve at the pleasure of the Speaker of the House of Representatives. The Speaker of the House of Representatives may dissolve the Committee at any time. Vacancies are filled by the Speaker of the House of Representatives. A Chair, Vice Chair, or other member of the Committee continues to serve until a successor is appointed.

Representative Ted Davis, Senior Chair Representative Holly Grange, Co-Chair Representative Frank Iler, Co-Chair Representative Scott Stone Representative William Brisson Representative Jimmy Dixon Representative Elmer Floyd

Representative Kyle Hall Representative Pricey Harrison Representative Pat McElraft Representative Chuck McGrady Representative Bob Muller Representative Bob Steinburg Representative Larry Yarborough

Section 3. The Committee, while in the discharge of its official duties, may exercise all powers provided for under G.S. 120-19 and Article 5A of Chapter 120 of the General Statutes. The Committee may contract for professional, clerical, or consultant services, as provided by G.S. 120-32.02

Section 4. Members of the Committee shall receive per diem, subsistence, and travel allowance as provided in G.S. 120-3.1.

Section 5. The expenses of the Committee including per diem, subsistence, travel allowances for Committee members, and contracts for professional or consultant services shall be paid upon the written approval of the Speaker of the House of Representatives pursuant to G.S. 120-32.02(c) and G.S. 120-35 from funds available to the House of Representatives for its operations. Individual expenses of \$5,000 or less, including per diem, travel and subsistence expenses of members of the Committee, and clerical expenses shall be paid upon the authorization of a Chair of the Committee. Individual expenses in excess of \$5,000 shall be paid upon the written approval of the Speaker of the House of Representatives.

Section 6. The Legislative Services Officer shall assign professional and clerical staff to assist the Committee in its work. The Director of Legislative Assistants of the House of Representatives shall assign clerical support staff to the Committee.

COMMITTEE PROCEEDINGS

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The House Select Committee on North Carolina River Quality met seven times after the 2017 Regular Session. The following is a brief summary of the Committee's proceedings. Detailed minutes and information from each Committee meeting are available in the Legislative Library.

AGENDA

9:00 a.m. Thursday, September 28, 2017 Room 643 Legislative Office Building Raleigh, North Carolina

- 1. Call to order

 Representative Davis, presiding
- 2. Introductory remarks by Cochairs
 Representative Davis
 Representative Grange
 Representative Iler
- 3. Presentation on the regulatory history of the Chemours Fayetteville Works facility including:
 - The permitting and enforcement history of the facility at the State and federal levels
 - All legal action taken by the State relative to the Chemours Fayetteville Works facility
 - Water quality test results for wells adjacent to the Chemours Fayetteville Works facility and efforts to address contamination
 - Investigation into potential air emissions

(1 hour 30 minutes)

Sheila Holman, Assistant Secretary for Environment Department of Environmental Quality

4. Presentation of action plan to implement Section 20(a)(1) of House Bill 56 (GenX Response Measures); report on the GenX contamination of the Cape Fear Public Utility Authority's aquifer storage (1 hour)

Mike Brown, Chairman of the Board Cape Fear Public Utility Authority Board

Frank Styers, Chief Operations Officer Cape Fear Public Utility Authority (NPDES) permitting backlog, private well water contamination and potential monitoring, and federal emerging contaminant standards.

Mr. Mike Brown, Chairman of the Board, Cape Fear Public Utility Authority (CFPUA), and Mr. Frank Styers, Chief Operations Officer, CFPUA, reported on CFPUA's implementation of GenX response measures as directed by House Bill 56 (S.L. 2017-209).

The Committee discussed the Authority's use of reverse osmosis to treat contamination, Dr. Knappe's report on treatment options for emerging contaminants, and the Authority's ongoing and future testing and treatment operations.

Mr. Mark Lanier, Assistant to the Chancellor, University of North Carolina Wilmington (UNCW), and <u>Dr. Ralph Mead</u>, Professor, Department of Chemistry and Biochemistry, UNCW, reported on UNCW's implementation of GenX response measures as directed by House Bill 56 (S.L. 2017-209).

The Committee discussed UNCW's use of funding, establishment of health goals, possible bioaccumulation of GenX, the process to identify new chemicals, and similarities between C8, GenX and PFOA.

After a lunch break, <u>Mr. Mark Benton</u>, Deputy Secretary, Department of Health and Iluman Services (DHHS), Division of Public Health (DPH), and <u>Dr. Zack Moore</u>, State Epidemiologist, DHHS, DPH, presented on the presence and health effects of GenX and related compounds in the Lower Cape Fear River Basin.

The Committee discussed the health effects of GenX on humans versus animals, how DPH began its investigation and the starting point for controlled laboratory studies, guidance for setting health standards, and establishing health standards and goals for GenX.

Ms. Tracy Skrabal, Coastal Scientist and Manager, Southeast Regional Office, North Carolina Coastal Federation, and Dr. Lee Ferguson, Associate Professor, Department of Civil and Environmental Engineering, Duke University, presented on emerging compounds and federal regulations, State regulations, and regulatory gaps.

The Committee discussed possible regulatory, technological, research, and infrastructure gaps in addressing emerging contaminants, where the burden of proof lies for proving certain discharges, other emerging contaminant monitoring systems, GenX detection in other states, whether GenX is included in the federal Safe Drinking Water Act, whether the Toxic Substances Control Act needs reform, and bioaccumulation of GenX in the environment.

- 5. Department of Health and Human Services update on response to emerging compounds and responses to previous questions, including:
 - Description of Departmental resources devoted to the monitoring, analysis, and regulation of emerging compounds
 - Overview of research and studies that contributed to the 140 parts per trillion health goal for GenX
 - Description of the Science Advisory Board and its work (45 minutes)

Elizabeth Cuervo Tilson, MD, MPH State Health Director, Chief Medical Officer Department of Health and Human Services

Danny Staley, MS Director, Division of Public Health Department of Health and Human Services

Zack Moore, MD, MPH State Epidemiologist and Epidemiology Section Chief Division of Public Health, Department of Health and Human Services

6. Update on the action plan to implement Section 20(a)(1) of House Bill 56 (GenX Response Measures) and testing conducted by the Cape Fear Public Utility Authority for the filtration and removal of GenX and other emerging compounds from drinking water (45 minutes)

Jim Flechtner, Executive Director Cape Fear Public Utility Authority

Frank Styers, Chief Operations Officer Cape Fear Public Utility Authority

- 7. Presentation on issues concerning emerging compounds (30 minutes)
 Kemp Burdette, Cape Fear Riverkeeper
 Cape Fear River Watch
- 8. Commission discussion and announcements
- 9. Adjourn

The second meeting of the House Select Committee on North Carolina River Quality was held on Thursday, October 26, 2017, at 9:30 a.m. in Room 643 of the Legislative Office Building. Representative Davis presided.

<u>Dr. Detlef Knappe</u>, Professor, Department of Civil, Construction, and Environmental Engineering, North Carolina State University, presented on research into emerging

AGENDA

9:30 a.m. Thursday, November 30, 2017

Room 643 Legislative Office Building Raleigh, North Carolina

- 1. Call to order

 Representative Davis, presiding
- 2. Introductory remarks by Cochairs
 Representative Davis
 Representative Grange
 Representative Iler
- 3. Department of Environmental Quality update on response to emerging compounds and responses to previous questions, including:
 - Latest surface water and groundwater monitoring results
 - Information on air emissions from the Chemours Fayetteville Works facility
 - Enforcement actions, including enforcement actions related to an unreported chemical spill at the Chemours Fayetteville Works facility
 - Discovery of additional emerging compounds
 - Information on Departmental water quality monitoring (2 hours)

Sheila Holman, Assistant Secretary for Environment Department of Environmental Quality

Linda Culpepper, Deputy Director, Division of Water Resources Department of Environmental Quality

Michael Scott, Director, Division of Waste Management Department of Environmental Quality

Mike Abraczinskas, Director, Division of Air Quality Department of Environmental Quality

- 4. Discussion of schedule and plans for future committee meetings
- 5. Announcements
- 6. Adjourn

The third meeting of the House Select Committee on North Carolina River Quality was held on Thursday, November 30, 2017, at 9:30 a.m. in Room 643 of the Legislative Office Building. Representative Davis presided.

AGENDA

9:30 a.m. Thursday, January 4, 2018

Room 643 Legislative Office Building Raleigh, North Carolina

- 1. Call to order

 Representative Ted Davis, presiding
- 2. Introductory remarks by Cochairs
 Representative Ted Davis
 Representative Holly Grange
 Representative Frank Iler
- Committee consideration and vote on short-term legislative proposals for the January 10, 2018 Session

 Representative Ted Davis

Public Comment

- 4. Committee discussion on non-agenda items and announcements
- 5. Adjourn

The fourth meeting of the House Select Committee on North Carolina River Quality was held on Thursday, January 4, 2018, at 9:30 a.m. in Room 643 of the Legislative Office Building. Representative Davis presided.

Mr. Jeffrey Hudson, Committee Counsel, House Select Committee on North Carolina River Quality, summarized a Proposed Committee Substitute, 2017-SBz-21 [v.13], that would implement short-term legislative proposals to address water quality issues relating to the Chemours discharge of GenX into the Cape Fear River. The entire PCS, 2017-SBz-21 [v. 13], is included in this report's Recommendations, on page 29.

The Committee discussed the requirement that the Department of Health and Human Services (DHHS) work with the Science Advisory Board to develop "health goals," and whether health goals were legal/regulatory standards.

Public comment on the proposals focused on requesting funding for DEQ. Representative Davis said that the Committee was working to secure appropriations to address GenX, but could not promise the size or timing of the appropriation at the time of the meeting.

Representative McGrady echoed comments from the rest of the Committee, saying that the PCS was a good first step to move towards addressing the GenX issue, but that it is not intended to solve the GenX problem entirely.

AGENDA

9:30 a.m. Wednesday, February 21, 2018

Room 643 Legislative Office Building Raleigh, North Carolina

1. Call to order

Representative Ted Davis, presiding

2. Introductory remarks by Cochairs
Representative Ted Davis
Representative Holly Grange
Representative Frank Iler

- 3. Department of Environmental Quality update on response to emerging compounds and responses to previous questions, including:
 - Spikes in GenX concentrations near the Cape Fear Public Utility Authority Plant in December, 2017
 - Potential use of private drinking water well filtration systems
 - Update on enforcement actions taken

(1 hour 15 minutes)

Sheila Holman, Assistant Secretary for Environment Department of Environmental Quality

Linda Culpepper, Deputy Director, Division of Water Resources Department of Environmental Quality

Michael Scott, Director, Division of Waste Management Department of Environmental Quality

Mike Abraczinskas, Director, Division of Air Quality Department of Environmental Quality

4. Interim report on implementation of Section 20(a)(1) of S.L. 2017-209 (House Bill 56) (GenX Response Measures); report on spikes in GenX concentrations near the Cape Fear Public Utility Authority Plant in December, 2017 (30 minutes)

Jim Flechtner, Executive Director
Cape Fear Public Utility Authority

Frank Styers, Chief Operations Officer Cape Fear Public Utility Authority

5. Interim report on implementation of Section 20(a)(2) of S.L. 2017-209 (House Bill 56) (GenX Response Measures) (45 minutes)

Dr. Robert Keiber, Professor and Graduate Coordinator

Department of Chemistry and Biochemistry,

The Committee discussed the ability of citizens to use private wells, the difference in test results between CFPUA and DEQ, the potential of publishing test results outside of CFPUA's website, possible collaboration between CFPUA, DEQ, and Chemours, installing home filtration systems, fluctuating GenX levels, potential non-point sources of GenX, comparisons between GenX levels upstream and after filtration, notice to the public of ongoing filtration efforts, and additional research on GenX and other contaminants.

<u>Dr. Robert Keiber</u>, Professor, Department of Chemistry and Biochemistry, University of North Carolina Wilmington (UNCW), reported on UNCW's implementation of GenX response measures, as directed by S.L. 2017-209. Dr. Keiber updated the Committee on UNCW's research and contaminant sampling.

The Committee discussed CFPUA's efforts below the Cape Fear dam, how GenX could still show up in the Cape Fear River after Chemours moved to a closed-loop system, how UNCW has addressed GenX in sediment, and the extent and range of GenX and other emerging contaminants found throughout the State.

After a lunch break, <u>Mr. Mark Strynar</u>, Physical Scientist, National Exposure Research Laboratory, EPA, presented on the use and availability of high-resolution mass spectrometers at EPA's Raleigh-Durham facility.

The Committee discussed West Virginia's experience with C8 processors, bottled water, various mass spectrometers, the University system's capability and capacity to handle water quality testing, targeted versus non-targeted testing, Senate discussions on mass spectrometers, and water sample testing for pharmaceuticals.

Mr. Andy Miller, Director of Legislative Affairs, DEQ, presented on the current availability of mass spectrometers in State government.

The Committee discussed funding for DEQ and the Department of Health and Human Services, staffing changes because of GenX contamination, the H189 proposal from earlier in the year, and continued support for addressing the GenX contamination.

<u>Chairman Ted Davis</u>, presented an overview of the differences between the House and Senate versions of H189.

There was extensive Committee discussion about ongoing university research, the need for DEQ to have a mass spectrometer, legislative strategies for working with the Senate to address GenX contamination, and how to move forward into the short session.

Ms. Sheila Holman, Assistant Secretary for the Environment, Department of Environmental Quality (DEQ), reported on DEQ's ongoing response to GenX contamination. Her presentation included specific updates on testing and enforcement actions from the Divisions of Water Resources, Waste Management, and Air Quality.

The Committee discussed how water sampling was conducted, possible explanation for spikes in GenX concentration in stormwater runoff, previous public comment on Chemours' wastewater permit applications, timelines for certain action by Chemours, funding requests from DEQ and the Department of Health and Human Services, providing clean water to affected citizens, developing health goals for GenX, potential enforcement mechanisms against Chemours, historical health goals for GenX, and additional funding.

The business meeting was followed by a tour of the Department of Environmental Quality's Water Sciences and Air Quality Lab Complex at 4403 Reedy Creek Road, Raleigh, North Carolina.

Ms. Sheila Holman, Assistant Secretary for the Environment, Department of Environmental Quality (DEQ), reported on DEQ's ongoing response to GenX contamination. Her presentation included specific updates on testing from the Divisions of Water Resources, Waste Management, and Air Quality, as well as updates on ongoing enforcement actions.

The Committee discussed GenX concentrations found in raw water, providing additional context for GenX concentrations in rainwater, potential revisions to the current GenX health goal, how DEQ is managing the increased workload, sludge testing, the long-term plan for providing clean water to affected homes, the use of newer rainwater collection buckets, and the timeline for installing a thermal oxidizer at the Chemours facility.

Mr. Jim Flechtner, Executive Director, Cape Fear Public Utility Authority (CFPUA), reported on CFPUA's implementation of GenX response measures, as directed by S.L. 2017-209.

The Committee discussed CFPUA's efforts to disseminate this information to the public, the raw water test results in CFPUA's report, whether the issue of emerging contaminants is unique to the Cape Fear or more widespread, whether CFPUA asked other industrial dischargers for chemical discharge information, the ability of DEQ to handle additional emerging contaminants, potential costs to ratepayers to cover infrastructure expenditures, the responsibilities of other industrial dischargers, and whether health goals exist for all emerging contaminants.

<u>Dr. Ralph Mead</u>, Professor, Department of Chemistry and Biochemistry, University of North Carolina Wilmington (UNCW), and <u>Mr. Mark Lanier</u>, Assistant to the Chancellor, UNCW, reported on UNCW's implementation of GenX response measures as directed by House Bill 56 (S.L. 2017-209).

The Committee discussed continued rain and wind modelling, the solubility of GenX, whether DEQ has the capacity to fully address emerging contaminants, when UNCW's research began, biosolid and sludge testing, the positive oyster study results, the difference between parts-per-billion and parts-per-trillion, concerns over interpretation of the study results, potential cost recovery by DEQ or CFPUA, making technical changes to the UNCW study, and when the UNCW report was made public.

The Committee then discussed the March 22 site visit and the inadequacy of DEQ's water testing equipment, past legislative attempts to address GenX, previous spending priorities by past DEQ administrations, and the legislative proposal in this report.

Representative Harrison moved to adopt this report, and the motion passed unanimously.

The Committee then discussed plans for the Committee, extending into the next interim, as well as the possibility of renaming the Committee to better reflect the work done in this interim.

RECOMMENDATIONS

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GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2017

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BILL DRAFT 2017-SBz-21 [v.13] (12/04)

(THIS IS A DRAFT AND IS NOT READY FOR INTRODUCTION) 01/02/2018 11:16:06 AM

Short Title: Short Term Response to Emerging Contaminants. (Public)

Sponsors:

Referred to:

A BILL TO BE ENTITLED

AN ACT TO IMPLEMENT SHORT-TERM MEASURES TO RESPOND TO EMERGING CONTAMINANTS IN THE ENVIRONMENT.

The General Assembly of North Carolina enacts:

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DIRECT THE DEPARTMENT OF HEALTH AND HUMAN SERVICES TO CONSULT WITH THE SECRETARIES' SCIENCE ADVISORY BOARD IN THE DEVELOPMENT OF HEALTH GOALS FOR CONTAMINANTS

SECTION 1.(a) For purposes of this section, the Secretaries' Science Advisory Board shall mean the Science Advisory Board established by the Secretary of Environmental Quality and the Secretary of Health and Human Services on July 28, 2017.

SECTION 1.(b) The Department of Health and Human Services shall consult with the Secretaries' Science Advisory Board on the Department's process for the establishment of health goals for contaminants. The Secretaries' Science Advisory Board shall review the process by which the Department establishes health goals for contaminants and make recommendations on how to improve the process, including how to promote greater public understanding of and confidence in the health goals.

SECTION 1.(c) To the extent practicable, the Department of Health and Human Services shall notify the Chair of the Secretaries' Science Advisory Board prior to issuing a provisional health goal for a contaminant. The Department of Health and Human Services shall submit all newly issued provisional health goals to the Secretaries' Science

22 Advisory Board at their next scheduled meeting.

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STUDY NPDES PERMIT PROGRAM

Environmental Control, the Tennessee Department of Environment and Conservation, the Virginia Department of Environmental Quality, and the West Virginia Department of Environmental Protection to improve processes for sharing information about contaminants identified in surface water or groundwater shared by or passing or flowing across the border of those states and this State. As needed, the Department shall share with those agencies water quality data for, and information about any contaminant identified in, surface water or groundwater shared by or passing or flowing across the border of those states and this State."

DEPARTMENT OF ENVIRONMENTAL QUALITY REPORTING AND NOTICE STUDY

SECTION 4. The Department of Environmental Quality shall study the statutory requirements for dischargers of untreated wastewater, untreated waste, and other substances to notify the Department and the public of discharges, including the volumetric thresholds that trigger the reporting requirements, to ensure that the requirements are sufficient to protect public health and provide adequate notice to the Department and the public. The Department shall consider whether there are any conflicts or redundancies in the statutory notice and reporting requirements. The Department shall also study its processes for notifying the General Assembly and the Environmental Management Commission of the presence in the environment of emerging chemicals for which an applicable discharge standard has not been established under State or federal law. The Department shall report its findings, including any legislative recommendations, to the House Select Committee on North Carolina River Quality, the Senate Select Committee on North Carolina River Quality, and the Environmental Review Commission, no later than April 1, 2018.

WATER UTILITY CIVIL LIABILITY STUDY

SECTION 5. The School of Government at the University of North Carolina at Chapel Hill shall study the extent to which public and private water utilities may be held civilly liable for distribution of drinking water contaminated by a pollutant without applicable discharge standards established under State or federal law, and the extent to which public water utilities and private water utilities are treated differently for purposes of civil liability. The School of Government shall submit the results of the study 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 April 1, 2018.

EFFECTIVE DATE

SECTION 6. Except as otherwise provided, this act is effective when it becomes law.