# Update on the GenX situation

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## From Dr. Detlef Knappe, NCSU:

- Evaluating home filters for removal of PFECAs and PFESAs as well as legacy PFASs
- Finalizing data analysis of water samples for the R21 grant (Hoppin) for PFECAs and PFESAs as well as legacy PFASs
- Conducting analysis of surface water samples collected in the surroundings of the Chemours plant
- Developing and evaluating new sorbents for PFAS removal
- Beginning two new DoD funded projects that focus on development and evaluation of water treatment options for PFAS removal.

#### From Dr. Mark Strynar, US EPA-RTP:

- Standards for Nafion BP1 and BP2 which were synthesized by Chemours and shared with me are being added to our existing analytical methods for water.
- -Methods are being developed to analyze human serum/urine samples from participants from Wilmington, NC as part of the R21 grant (Hoppin) for GenX and related PFECAs and PFESAs.
- -Additional previously unreported PFAS in water samples are now being investigated in samples collected by NCDEQ this summer/fall.
- -There are ongoing efforts within EPA RTP concerning investigations of air emissions of PFAS in Chemours Fayetteville, NC stack testing.
- -Existing methods for analysis of legacy PFAS in fish tissues are being adapted to include these new PFAS such as GenX and Nafion BP1 and BP2. Hopes to analyze fish tissue in near future from Fayetteville, NC area.

#### From Dr. Jane Hoppin, NCSU:

- The GenX Exposure study recruited >300 volunteers in early November.
- We collected tap water from people's homes, and blood and urine samples from individuals. All samples will be analyzed for GenX and other PFAS compounds.
- We are nearing completion of the water analysis and are preparing to report that back to the participants and the community following final QA/QC of the data and human subjects approval to release the data.
- We are getting started with the biological samples.
- We are trying to find additional resources to support a second sample collection and potentially include people near the Chemours plant.

## From Dr. Ralph Mead, UNCW Chemistry:

- Sediment samples have been collected from above Fayettville Works facility to the mouth of the Cape Fear River on six separate trips.
- These sediments are currently being processed and analyzed for GenX as well as other non targeted compounds
- PFMOAA had been synthesized. We also will be isolating unknown PFAS compounds for structure elucidation.
- GenX has been detected in precipitation collected at NSF funded station at UNCW.
- Biodegradation experiments will start once the sediment survey is complete.
- Weekly sampling of raw and finished water at Sweeney is continuing, data is being processed.

## From Cape Fear Public Utility Authority:

- CFPUA samples the finished water from Sweeney Water Treatment Plant on a weekly basis for GenX. Levels of GenX in the finished water continue to remain below the NCDHHS health goal of 140 parts per trillion.
- The pilot study at Sweeney Water Treatment Plant is in its second phase of testing GAC and Ion Exchange technologies. The pilot study has now incorporated over 40 different per-fluorinated compounds (including Nafion BP 1 and 2) into its sampling regime to investigate the potential for removal. Testing is expected to be completed this spring.
- CFPUA continues to release <u>updates</u> to the public twice weekly through our website and our Notify Me! subscription program.
- As part of HB 56, we continue to share our results with Brunswick and Pender Counties. We will submit a final report to the Environmental Review Commission by April 1, 2018.
- Legal action against Chemours and Dupont continues to progress.

#### From NC DEQ:

• If interested, we have an open position within the Public Water Supply Section of DEQ working on initiatives related to unregulated contaminants. To view the job posting, please click on the title below.

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- Classification Title: <u>Environmental Program Consultant</u>
- Position number: 65024018
- Section: Water Resources/Public Water Supply
- Location: Wake County
- Salary Level /Grade: 76
- Recruitment Salary: \$50,238 \$60,000
- Posting dates: 02/19/2018 03/05/18
- Posting audience: EXTERNAL

#### Emerging Issues:

- Aerial discharges and transport
- Groundwater contamination
- Multiple PFCs
- Biological uptake: biota and humans
- Health advisory goals