Current Water Sampling by DEQ, and Analysis by EPA Athens Laboratory

- Two composite samples weekly at Chemours wastewater outfall into the Cape Fear River: Monday–Thursday and Friday-Sunday

- Drinking water facilities downstream are sampled weekly:
  - Bladen Bluff
  - International Paper
  - NW Brunswick
  - Pender County
  - CFPU Sweeney

- Starting ambient monitoring for PFAS across North Carolina
  - Jordan Lake watershed monthly Jan – June 2018
  - Falls Lake watershed monthly May – October 2018
Data from Chemours Wastewater outfall (parts per trillion)
Path Forward

• Chemical analysis – develop and harmonize existing test methods
  • Wastewater, sediment, soil, food, air emissions, blood serum, urine
  • Analytical reporting levels, widely accessible, cost effective analytical methods to identify and quantify environmentally relevant concentrations of known and unknown PFAS

• Research on human health and ecological toxicity
  • Prioritize PFAS for study on the prevalence of human and ecological exposures, exposure concentrations, and anticipated toxicity potency
  • Rapid bioassays
  • Chemical mixtures – evaluate additive and synergistic effects on human health and ecological risk
  • Evaluate the need for new wastewater Whole Effluent Toxicity methods for aquatic toxicology (add new organisms for surrogate testing)
  • Fate and bioaccumulation studies to evaluate the mobility and bioavailability of different chemical classes of PFAS
  • Toxicity bench marks (Reference Dose, similarity in chemical families, cumulative exposure)

• NC is using the Secretaries’ Science Advisory Board to make recommendations on health values and to prioritize chemicals for evaluation
Reference material:

Department of Environmental Quality GenX information:

Division of Water Resources: https://deq.nc.gov/about/divisions/water-resources/

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Thank you for joining us today.