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Sushma Masemore
Assistant Secretary

Tom Augspurger, Ph.D.
Chairman, N.C. Secretaries' Science Advisory Board

N.C. Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

August 24, 2023

Re: Request to add PFPrA to NCDEQ's Priority PFAS list

Dear Assistant Secretary Masemore and Dr. Augspurger,

Since October 2022, Cape Fear Public Utility Authority (CFPUA) has been operating deep-bed Granular Activated Carbon (GAC) filters at its Sweeney Water Treatment Plant to remove per- and polyfluoroalkyl substances (PFAS) contamination in raw water from the Cape Fear River to produce treated drinking water for our customers in Wilmington and New Hanover County.

Overall, the new GAC filters have been very effective at removing PFAS contamination during treatment. Results of our regular monitoring for PFAS consistently show concentrations at or near non-detection in finished water for the vast majority of the 65 compounds, including GenX, currently analyzed by our contract laboratory. This includes all six compounds proposed by the U.S. Environmental Protection Agency for National Primary Drinking Water Regulations.

PFAS contamination presents significant water treatment challenges, particularly when it comes to short- and ultra-short-chain PFAS such as perfluoro-2-methoxyacetic acid (PFMOAA) and perfluoropropanoic acid (PFPrA). The most recent analyses by our contract laboratory detected PFMOAA at 18.8 parts per trillion (ppt) and PFPrA at 18.0 ppt in finished drinking water at Sweeney sampled on August 8, 2023 (updated from results cited in mailed version of this letter). Together, PFMOAA and PFPrA comprise 59 percent of the total of 61.93 ppt for all PFAS compounds detected in finished water at Sweeney in the most recent sample.

Furthermore, the overwhelming majority of PFAS currently being detected in finished water lack benchmarks such as maximum contaminant levels, health advisory levels, or preliminary health goals that provide context when communicating these results to our customers and the community. Establishing such benchmarks will provide crucial information for CFPUA and other

public water systems to set treatment goals and provide authoritative information about drinking water quality to their customers.

PFMOAA has been a focus of staff at CFPUA for several years. PFMOAA was chosen as a benchmark to gauge overall PFAS removal by the new GAC filters, similar to its use as an "indicator compound" in certain provisions of the Chemours Consent Order. CFPUA staff are also closely following the State's work to develop toxicological evaluations for Group 1 Priority PFAS compounds, including PFMOAA.

In contrast to PFMOAA, PFPrA surfaced as a concern for CFPUA only recently. PFPrA was the first PFAS compound to be detected in CFPUA finished drinking water following the beginning of treatment by the GAC filters.

Early sampling had low confidence levels due to sample contamination and laboratory quantification issues; however, laboratory detection methods for this compound now demonstrate a well-established track record, which allowed CFPUA staff in April 2023 to affirm its presence in valid, repeatable sampling. Following the initial detection, CFPUA staff pored over the scant research available for PFPrA at the time but were unable to determine whether the levels being detected in finished water warranted concern.

PFPrA has been detected at the Fayetteville Works as part of Chemours' compliance with Consent Order obligations. We believe the PFPrA contamination observed in surface and groundwater in the lower Cape Fear River region originates at the Fayetteville Works facility and is a result of Chemours/DuPont PFAS manufacturing over the last 40 years.

CFPUA and our customers appreciate the State's work to assess the toxicity of PFMOAA as one of the State's Priority PFAS. We hope that these efforts help to derive a health goal for chronic consumption of PFMOAA like that developed for GenX in 2017. We believe PFPrA also warrants priority focus.

CFPUA urges the N.C. Department of Environmental Quality and the Secretaries' Science Advisory Board to add PFPrA to its list of Priority PFAS for additional study.

Please let me know if I or any of the staff at CFPUA can be of assistance or provide additional information.

Sincerely,

Kenneth Waldroup, P.E.