

PUBLIC WORKS COMMISSION  
MEETING OF WEDNESDAY, JANUARY 10, 2024  
8:30 AM

Present: Donald L. Porter, Chairman  
Christopher G. Davis, Vice Chairman  
Ronna Rowe Garrett, Secretary  
Richard W. King, Treasurer

Others Present: Timothy L. Bryant, CEO/General Manager  
Adam Lindsay, Assistant City Manager  
Chancer McLaughlin, Hope Mills Interim Town Mgr./Liaison  
Media

Absent: Deno Hondros, City Council Liaison  
Jimmy Keefe, Cumberland County Liaison

I. REGULAR BUSINESS

Chairman Donald Porter called the meeting of January 10, 2024, to order at 8:30 am.

APPROVAL OF AGENDA

Commissioner Christopher Davis motioned to approve the agenda. The motion was seconded by Commissioner Ronna Garrett and unanimously approved.

II. PRESENTATIONS

PWC Jay Walkers Alzheimer's Association Presentation  
Presented by: Bobby Russell, PWC Jay Walkers

Mr. Bobby Russell, Human Resource Officer provided a background of PWC's Jay Walkers Alzheimer's Association involvement.

Mr. Mark Brown (former Customer Programs Officer) championed this cause when Mr. Jay Reinstein (former Assistant City Manager) was diagnosed with Alzheimer's. Ms. Justice-Hinson (CCR), Mr. Russell (HR), Mr. O'Quinn (EC), Mr. Reid (EE), and Mr. Ray Lewis (EE) have taken up this important initiative, along with the assistance of Ms. Armstrong (HR).

Mr. Russell introduced Mr. Jay Reinstein. Mr. Reinstein stated the partnership he had with PWC while he was with the City of Fayetteville was amazing. The friendship he has with the people of this organization means so much to him. He went on to state Mr. Brown and he became good friends while he was the liaison between the City and PWC, and that friendship meant and means much to him. He went on to state PWC has raised approximately \$40,000.00 in the last couple of years. He stated this type of commitment does not happen without leadership. And the leadership here at PWC says it is important. He thanked Mr. Bryant, Commissioners Porter, Garrett, Davis, and King. He also thanked

the committee for their tireless efforts. He also thanked his core Alzheimer's team: Tracey Boyles, Elizabeth Somerindyke, and Victoria Huggins. They have raised almost \$200,000.00 with the help of PWC.

Mr. Reinstein then presented to Mr. Bryant an award in appreciation to PWC's support of Alzheimer's. PWC presented a check to the Alzheimer's Association in the amount of \$

### III. CONSENT ITEMS

Commissioner Christopher Davis motioned to approve the Consent Items. Motion was seconded by Commissioner Richard King, and unanimously approved.

- A. Approve Minutes of meeting of December 13, 2023.
- B. Approve the Lease of Suite 301 of the R.C. Williams Building to Movement Mortgage, LLC, ("Lessee"). The initial term of the lease is 3 years. Lessee has agreed to an annual rent rate of \$49,588.00.

### END OF CONSENT

### IV. GAC PILOT STUDY AND PROPOSED FACILITIES

Presented by: Mick Noland, Chief Operations Officer, Water Resources  
Misty Manning, Water Resources Engineering Manager

Mr. Timothy Bryant presented Mr. Mick Noland who introduced Mr. David Briley, and Mr. Cory Hopkins of Hazen Sawyer. He stated PWC has worked closely with them for years regarding Hoffer and the Glenville Water Treatment Facilities. Mr. Noland stated we began working on PFAS four to five years ago with some of the samplings we have done, as well as the early indicators that this will affect, not only PWC but others in the water industry with PFAS forever chemicals.

Mr. David Briley stated they will give a background of PFAS; EPA's proposed rule; some of the technologies; PWC's proactive efforts; and next steps.

PFAS is a class of manmade chemicals. Mr. Briley stated there are 1,000s of PFAS compounds. He will discuss a few today. PFAS stands for Polyfluoroalkyl or Perfluoroalkyl substances. He stated what makes these unique is they are very stable and resistant to biodegradation. They are referred to as 'forever chemicals'. He stated once your body digests them it is hard to get rid of them. They bio accumulate in people and animals.

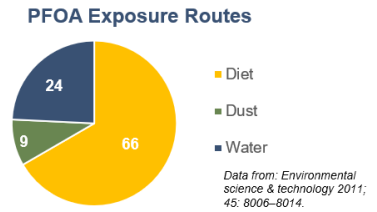
PFAS is about everywhere, he stated. These chemicals have been used in a wide range of consumer products.

Research has been done to take blood samples from people and animals around the world. PFAS can be detected in the blood from polar bears.

- Commercial and Consumer Products Containing PFAS:**
- paper and packaging
  - clothing and carpets
  - outdoor textiles and sporting equipment
  - ski and snowboard waxes
  - non-stick cookware
  - cleaning agents and fabric softeners
  - polishes and waxes, and latex paints
  - pesticides and herbicides
  - hydraulic fluids
  - windshield wipers
  - paints, varnishes, dyes, and inks
  - adhesives
  - medical products
  - personal care products (for example, shampoo, hair conditioners, sunscreen, cosmetics, toothpaste, dental floss)

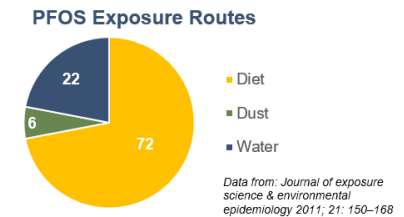
Because they are found in so many things and throughout the environment, human exposure to PFAS can come in many ways.

Mr. Briley stated the pie charts on the right, from peer reviewed studies, show sources of PFOA and PFOS exposure in humans.



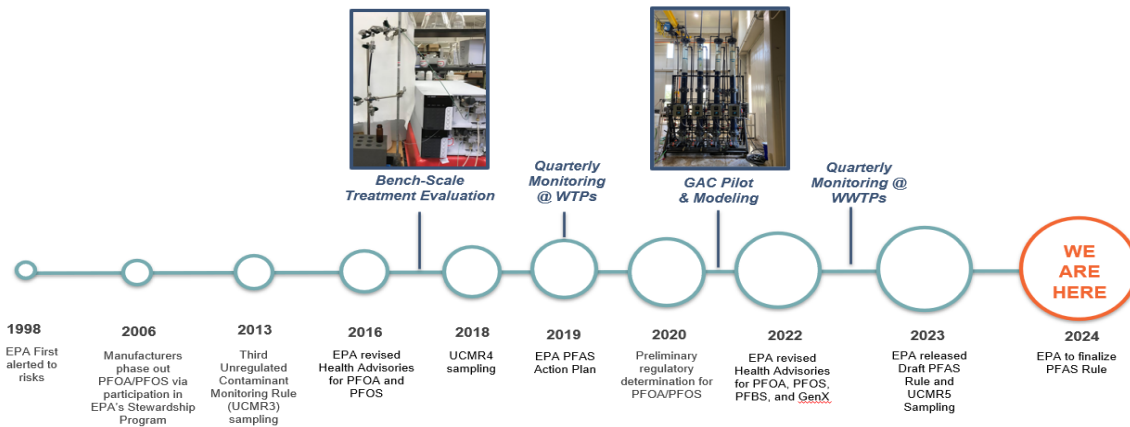
This data indicates that about 20 – 25% of human PFAS exposure comes from water, with the rest coming from food and even from inhalation of dust in the air.

PFAS is not just a water/wastewater problem. They are other steps people can take to minimize their risk.



Mr. Briley provided a roadmap of national data, which shows PFAS is a nationwide and worldwide issue.

The EPA has been looking at PFAS for some time now.

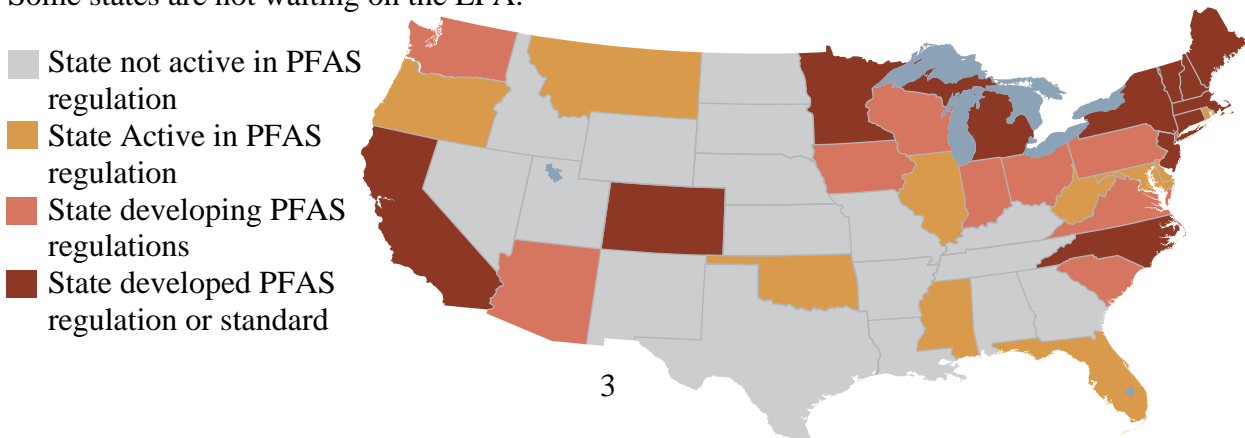


In 2016, they updated health advisory levels for two compounds. A few years later they developed an action plan to deal with this problem.

Last year they issued a draft rule to regulate a few compounds, and we are expecting that rule to be finalized in this quarter.

Mr. Briley highlighted the actions per the graph above and the proactive actions PWC has taken.

Some states are not waiting on the EPA.



## EPA PFAS Draft Rule

- Running annual average (RAA) of 4 consecutive quarterly samples
- Compliance achieved if:
  - RAA values  $\leq$  Maximum Contaminant Level (MCL)
  - Individual sample is  $<$  4x MCL

Compound	Proposed MCLG	Proposed MCL (enforceable levels)
PFOA	Zero	4.0 parts per trillion (also expressed as ng/L)
PFOS	Zero	4.0 ppt
PFNA	1.0 (unitless) Hazard Index	1.0 (unitless) Hazard Index
PFHxS		
PFBS		
HFPO-DA (GenX Chemicals)		

Mr. Corey Hopkins discussed PFAS treatment alternatives. He stated the conventional surface water treatment is not effective for treatment of PFAS, and there are limited technologies that are effective in dealing with these.

The EPA identified three best available technologies for PFAS treatment. They are:

- Granular Activated Carbon (GAC Adsorption)
- Ion Exchange
- Reverse Osmosis/Nanofiltration

Mr. Hopkins stated there are benefits and drawbacks to each technology.

### Granular Activated Carbon (GAC)

Benefits	Drawbacks
➤ Proven PFOA/PFOS removal	➤ Larger footprint
➤ Removal of other contaminants and Disinfection Byproduct (DBP) precursors	➤ Less effective for short-chain PFAS
➤ Media is reusable; PFAS destroyed when media reactivated	➤ Total Organic Carbon (TOC) may affect GAC capacity for PFAS

### ION Exchange (IX)

Benefits	Drawbacks
➤ Proven PFOA/PFOS removal	➤ Targets specific contaminants
➤ Smaller footprint	➤ Competing contaminants may affect resin capacity for PFAS
➤ May be more effective for short-chain PFAS	➤ IX resin is not reusable

### Reverse Osmosis (RO)/Nanofiltration

Benefits	Drawbacks
➤ Removal of most PFAS	➤ Reject volume – de-rate treatment capacity
➤ Removal of other contaminants and DBP precursors	➤ Concentrated waste stream disposal
	➤ Most expensive technology

Mr. Hopkins commended PWC’s efforts to inform the public. We have provided information about what is in the source water. Where PFAS comes from, the treatment alternatives, and the steps we have taken. He noted PWC publishes Water Quality Reports and has relevant PFAS facts on our website.

## Overall Assessment Strategy

Mr. Hopkins stated when they look to evaluate the appropriate strategy to implement for a utility. There are four major steps they take.

- Evaluate
- Test
- Design
- Construction

He stated Hazen has some of their best people looking into the PFAS issues for PWC.



**Erik Rosenfeldt, PhD, PE**

- 24 years
- Drinking Water Practice Lead
- 50+ PFAS projects nationwide



**Conner Murray, PhD**

- 3 years
- 50+ PFAS projects nationwide



**Cory Hopkins, PE**

- 22 years
- PFAS work with PWC & NC utilities



**Detlef Knappe, PhD**

- S. James Ellen Distinguished Professor at NC State University
- PFAS expert in detection and treatment technologies



**David Briley, PE**

- 26 years
- NC Drinking Water Lead
- 18+ PFAS projects nationwide

The evaluation effort includes a desktop study as well as small lab testing, which gives them the treatment effectiveness for the different technologies. It allows them to look at different media and contact times. They have completed concept level planning layouts where they would fit in the treatment process and where they would sit on the sites. Then they leverage that information and move into the testing phase.

This is where they do the larger scale testing, which is more replicable of what they may expect in performance in a full-scale facility.

### Pilot-Scale Testing

If you need a subhead, put it here

1. Pilot columns set up at both water treatment facilities
  - More comparable to full-scale; understand seasonal performance
  - Evaluated other regulated/non-regulated contaminants removal
2. Breakthrough modeling
  - Understand media change-out frequency
  - O&M cost planning



P.O Hoffer Pilot Test Columns

*Leveraged findings to inform next phase – Design*

Mr. Hopkins stated their recommended selected treatment strategy is GAC Adsorption. He also stated treatment is needed at both plants (P.O. Hoffer and Glenville Lake).

The next steps are:

- Develop utility PFAS management strategy
- Construction of Powdered Activated Carbon (PAC) Storage and Feed Facilities at P.O. Hoffer
- Begin final design of Post-Filter GAC Adsorption Facilities



*Generic Rendering of GAC Facilities*

Mr. Hopkins stated once EPA's rules are finalized, you typically have three years to reach compliance, unless there are significant capital investments that are needed at the facilities, in which you will have two additional years. He stated PWC is likely looking at the five-year timeline.

The anticipated initial project costs to include construction and engineering costs are approximately \$92M. Per Ms. Manning the projected on-going costs are approximately \$12M per year. Staff, Mr. Hopkins, and Mr. Briley responded to questions and comments from Commissioners.

Chairman Porter thanked Hazen and Sawyer, Mr. Bryant, and Mr. Noland for the update on the GAC Pilot and Proposed Facilities.

## V. GENERAL MANAGER REPORT

### **Safety/Weather**

Mr. Bryant stated the team continues to work safely with the challenges we have from day to day. We saw this weather coming toward us from the radar, and over the last 24 hours we saw just how challenging it was. The team stood up, worked through it and everyone executed flawlessly. He commended the Water Resources, Electric as well as the staff in the Admin. Building who made this happen. He stated we had an opportunity to restore 529 electric customers who were impacted last night, and we have a handful more that are not quite ready to take our power. He thanked the entire team that worked through the night last night and every night.

Mr. Bryant stated we did such a great job here; we are responding to a mutual aid request from the Town of Red Springs to assist them with their restoration efforts. We are sending a crew over to them to help them restore services.

### **UW Campaign**

The United Way Campaign is completed. We surpassed our \$135,000 goal. It was an outstanding response all across our organization as well as retirees and other citizens in the community to help us achieve our goal. We will have our PWC/United Way Celebration on January 26<sup>th</sup>. Mr. Bryant invited the Commissioners to join in recognizing the employees who achieved their individual and department level contributions.

## **Community Engagement**

He stated we heard from the Jay Walkers Team today. We cannot say enough about our ability to help that organization and we look forward to their next event in the Fall.

The Annual Grinding of the Greens will take place on Saturday, January 13<sup>th</sup> @ 8:30 am (weather permitting).

Community Advisory Group (CAG) meeting will be Tuesday, January 16<sup>th</sup> @ 6pm, here in the Operations Building in the Main Meeting Room (MMR).

## VI. COMMISSIONER/LIAISON COMMENTS

### *Commissioner Richard King*

No Comments

### *Commissioner Christopher Davis*

No Comments

### *Commissioner Ronna Rowe Garrett*

Commissioner Garrett thanked the staff for the storm response. Everyone runs home; gets out of school early; off work early. We have teams that go out into the danger and into the storms, and she thanked them.

She also stated she really did not realize how much PWC does in the community. It is not directed to be done by the CEO to the staff or by community partners. But it is indicative in a culture of all the leaders. She thanked all the leaders, and the officer team. Everyone is so giving, and they care about the community, and that is what we want.

### *Commissioner Donald Porter*

Commissioner Porter stated he is also impressed with the team. He mentioned when he receives the outage report, soon after, he receives another notice the power has been restored. He stated that just does not happen by waving a magic wand. It is indicative of the hard work by our electric construction staff.

Commissioner Porter also mentioned he received a call from Cape Fear Regional Theatre. Mr. Bryant stated they are doing amazing things over there, and we have a presentation planned for April.

## VII. REPORTS AND INFORMATION

The Commission acknowledges receipt of the following reports and information.

- A. Monthly Cash Flow Report - November 2023
- B. Recap of Uncollectible Accounts – November 2023

- C. Investment Report – November 2023
- D. Utility Payments by Payment Type – December 2023
- E. Career Opportunities
- F. Financial Statement Recaps – November 2023
  - Electric
  - Water/Wastewater

VIII. CLOSED SESSION PURSUANT TO NORTH CAROLINA GENERAL STATUTES 143-318.11(A)(6) FOR PERSONNEL MATTERS

Commissioner Ronna Rowe Garrett motioned to enter closed session pursuant to NCGS 143-318.11(A)(6) for personnel matters. Motion was seconded by Commissioner Richard King, and unanimously approved at 9:39 a.m.

There being no further discussion, upon motion by Commissioner Ronna Rowe Garrett, seconded by Commissioner Christopher Davis, and unanimously approved, the Commission returned to open session at 10:25 a.m.

IX. ADJOURN

There being no further business, upon motion by Commissioner Ronna Rowe Garrett, seconded by Commissioner Christopher Davis, and unanimously approved, the Commission adjourned at 10:25 a.m.