

**Subcommittee on Water Resources and Environment
Hearing on Emerging Contaminants, Forever
Chemicals and More: Challenges to Water Quality,
Public Health, and Communities**

Wednesday, October 6, 2021

**Testimony from Mr. Christopher “Chris” F. Kennedy, Town Manager
for the Town of Pittsboro, North Carolina**

Chair DeFazio & Chair Napolitano,

I thank you for the opportunity to speak today about the effects of emerging contaminants and forever chemicals on a small town. My name is Chris Kennedy and I serve as the Chief Executive Officer in the capacity of Town Manager for Pittsboro, North Carolina, a quaint town of 4,537 residents in the piedmont of North Carolina nestled to the west of Raleigh and southeast of Greensboro. The latter proximity is of utmost importance to Pittsboro. While we are bolstered by the expansive growth found in the sprouting markets of Wake County and the Research Triangle Park, which tout some of the highest growth rates in the country, we are also downstream of the industry found in North Carolina's Piedmont Triad known for manufacturers and contributors of PFOS, PFOA and 1,4 dioxane. North Carolina is founded on an economy of industry that has supported this state, country and beyond for generations. Despite historic and continued prosperity on the industrial front, and we support a robust economy, we are fully enveloped in the negative externalities of this production.

In Pittsboro, the effects of PFOS, PFOA and 1,4 dioxane are among the worst in the country. Pittsboro draws its raw water from the picturesque Haw River, a tributary into the Cape Fear River. You may have heard about the Cape Fear River in articles discussing GenX in and around Wilmington, North Carolina. The PFAS levels in the Haw River at our raw water intake experience consistent readings nearing 100 ppt (parts per trillion) and have seen levels approaching 1,000 ppt. For context juxtaposition, the EPA has established a non-enforceable health advisory level of 70 ppt for the sum of PFAS chemicals. For 1,4 dioxane, the EPA has a nonbinding health advisory level established

between 0.35 and 35 ug/L (micrograms per liter), Pittsboro, as recently as June 30, 2021, was exposed to an upstream contamination of 687 ug/L. To be clear, Pittsboro has no industry that contributes to this concern. We are simply subject to upstream contamination with little recourse financially or in terms of policy at the state or federal level to pursue remedy. The effects of continued contamination on our residents have led to numerous health-compromising effects that I will allow my counterparts, those in the microbiological and other sciences realm, to further define and describe. I can state from a non-medical and non-scientific stance, that my residents are afraid of our drinking water and its effects on their short- and long-term health. The COVID-19 pandemic has only intensified these concerns as we now worry about the efficacy of the vaccines and our internal immune systems that are likely compromised by prolonged exposure to these contaminants via our drinking water. I speak as small-town Manager who requests your attention and action to reduce the source of these contaminants.

Despite our scale inequities, the Town has sought to remedy the problems with advanced treatment measures in our water system. We pilot studied low pressure reverse osmosis (LPRO), granular activated carbon (GAC), ion exchange (IX), and ultra-violet advanced oxidation processes (UV-AOP) to remove these contaminants from our drinking water. We are currently in the process of implementing a \$3.4 million project at our water treatment plant that we have titled "Fast-Track GAC". We have utilized the term "fast-track" as we seek immediate action despite our funding constraints. The term fast-track is also indicative of the compromises necessary to facilitate the installation of this infrastructure. Even at \$3.4 million, this project includes compromises such as serving

only one-half of our plant capacity [1.0-million-gallons of our 2.0-million-gallon plant capacity], infrastructure that is typically housed in a structure will have to be exposed to the elements and piping will be strewn across the ground because we simply cannot afford to cover or bury the infrastructure. To afford this project, the Town is spending the entirety of our American Rescue Plan Act (ARPA) funds distributed to us from the federal government to the State of North Carolina, totaling \$1.397 million, on this water treatment project. We have many other ARPA related needs, but find our water quality to be most important, justifying the 100% expense of this revenue. In addition to the revenue from the ARPA funds, we adopted a 43% increase to our water rates with the adoption of this current fiscal year budget. Frankly, such an increase in other communities would have the manager relieved of his duties. For further perspective, our entire enterprise (water and wastewater) fund budget in Fiscal Year 2020-2021 was \$3,993,447. So, it goes without further elaboration that a \$3.4 million advanced treatment project that nearly exceeds our typical operating and capital budget is concerning. These numbers also do not contemplate the expense of previous studies. We have identified the future costs to provide advanced treatment to eradicate PFOS, PFOA and 1,4 dioxane to cost \$15-20 million in initial capital expense, and millions more perpetually in increased operational expense running these sophisticated systems. Our customer base, at just over 2,100 individual accounts, cannot reasonably be burdened with this expense. The financial reality and demand to remedy these introduced contaminants is simply too great to organically, from a budgetary perspective, address the problem.

While I am not asking for funding in my testimony today as I share my story, I speak to support stricter regulations on emerging contaminants and forever chemicals. There is much discussion on what is a maximum acceptable contamination level, and whether that differs for drinking or recreational waters. However, all water basins are connected, by either literal contiguous connection or by evaporation and rain. Treating all bodies of water, both drinking water sources and recreation waters, with equivalent care by eliminating recommendations in favor of clear and precise levels of acceptable contamination ultimately provides my town financial relief by reducing my operational expense in the pre-treatment of our drinking water. The extent of expense of these advanced treatment methods is directly contingent upon the contamination levels in the raw water. The better the raw water, the more effective and longer lasting the treatment media or membranes. Increased efficacy and longevity reduce operational expense and future capital expansion costs. Cleaner water reduces demands on chemicals, filtering, electrical energy, and other costs that escalate quickly, especially in combination. Even with the ability to remove emerging contaminants, the impediments for advanced treatment methods are not merely price considerations. The externalities of the added advanced treatment measures are numerous and not without their own concerns. For instance, the granular activated carbon utilized in a GAC filtering system produces excellent filtering of PFOA and PFOS contaminants, however, this media is typically disposed of via incineration. The disposal methods, be they incineration or another, surely have secondary and tertiary effects that when compounded only displace the contamination briefly for drinking water purposes, entering the system again elsewhere

or downstream. Reverse osmosis, considered by many to be the best technology available, produces a concentrated effluent loaded with contaminants removed from the raw water. This concentrated effluent must be discharged somewhere, often back into the stream; again, only displacing the chemicals temporarily for a specific end user. Despite the technological advances that allow better filtration and removal of these emerging contaminants and forever chemicals from our drinking water, if we are only displacing these contaminants and we wish to alter this scenario, source reduction has to be at the forefront of our strategies.

In the past year, I have interviewed with The Guardian and Consumer Reports, and countless other media outlets. Now, here I speak with each of you. Small-town Managers barely break the front page of their local newspaper most days, and yet, due to our water quality, here I am in front of the United States Congress representing not only Pittsboro, but other communities like us, that are disproportionately affected with increased costs and demands on our water system due to chemical contamination without clear avenues to afford and manage such sophisticated infrastructure. My town is on verge of expansive growth with a project named Chatham Park that includes 22,000 homes and twenty-two million square feet of commercial development. This project alone will propel us from a small town with a population just under 5,000, to over 60,000 people at buildout. Economic development is a fierce competition, and the upstream contamination of our drinking water source is hindering our efforts. Our ability to see the fruits of this project and other development opportunities are compromised by our water quality. Realtors are now using real estate disclosures to alert potential buyers about our

water system. This negatively affects both residential and commercial growth. Even in a no-growth scenario, I find this plight unacceptable. Our current citizens and residents deserve better. The demand for more sophisticated water treatment methods robs from other needed utility projects that facilitate our growth. Duke University and North Carolina State University are studying the levels of contamination in my residents by drawing blood and sampling domestic water in our homes. This is a testament to our community's willingness to be a part of the solution, but it mainly serves as a reminder that we are closer to the statistical testing data in a lab analysis than the real solutions for the problem. I have the privilege of serving an engaged and willing elected body, citizenry, and customer base with little ability to effectuate real progress as we are continually subjected to contaminated water. Again, I speak to support proactive approaches rather than reactive treatments.

So, in summary and simply, I offer my testimony today to provide the insight of a small-town that is disproportionately burdened with the need to react to the injection of emerging contaminants and forever chemicals into our drinking water. I support the consideration of precise and enforceable maximum contaminant levels (MCLs), removing the term "recommendation" from the lexicon in the standards for emerging contaminants and forever chemicals, and the equal application of these MCLs for emerging contaminants and forever chemical standards for all water bodies. Anything contrary to this action negatively affects not only my town of Pittsboro, North Carolina, but towns and cities all over this country. I close with this: As the adage goes, water is the source of life. For me, water has become the source of consistent frustration and despair.