

**Testimony of Michael Hickey**  
**Before the Committee on Transportation and Infrastructure**  
**Subcommittee on Water Resources and Environment**

**“The Administration’s Priorities and Policy Initiatives under the Clean Water Act”**

September 18, 2019

Good morning. Thank you, Chairwoman Napolitano, Ranking Member Westerman, and members of the subcommittee for the invitation to speak today and tell my story.

My name is Michael Hickey. I live in Hoosick Falls, which is in upstate New York near the Vermont and Massachusetts border. I was born and raised there with my brother, my sister and my parents.

Hoosick Falls is my home, and it is a casualty of PFAS water pollution that’s left its toxic mark on my family and my neighbors.

Just months into his retirement, my father, John Hickey, was told he had kidney cancer. He passed away from this disease in 2013. A year after that, a teacher passed away in her late 40s from cancer. There was speculation around town about how many people were getting these rare illnesses. When you’re in a smaller community like Hoosick Falls, you pay attention to that, and I thought there might be something to it.

I knew our village’s water wells sat next to the local manufacturing facility that produces Teflon products, so I did a google search for “Teflon” and “cancer.” What I found was a C8 science panel from West Virginia and the first thing under the related illness section was a “probable link” between PFOA and kidney cancer – the very disease my dad passed away from.

Teflon is the brand name of a lab-made chemical used in a variety of products, such as nonstick pots and pans. In my hometown, it was used to waterproof big tents. Teflon is made using a chemical called perfluorooctanoic acid, that is PFOA or C8, which is in the PFAS chemical family. These PFAS compounds are known as “forever chemicals” because they don’t really break down in nature. They have been linked to a variety of health problems, from adverse impacts on the liver and the immune system to cancer.

I had never been involved with any environmental issues before, so this was all new to me. I probably read about three hours a night for the next couple of months to try to figure it out. When I thought that I had enough information, I passed it on to a local physician and I asked him to take a look to see if there was a connection. He did. He thought there was a higher incidence of those illnesses in our community.

At that point, we approached the mayor and asked if the city had tested for PFOA, but they had not because the EPA did not require it of smaller systems at that time.

I wanted to be able to sleep at night. I wanted to know if our water was making us sick. So, I looked up who did the testing for the DuPont study and it was a lab out of British Columbia, Canada. After contacting that lab, I went and I tested the water at my house, my mother's house, the local dollar store, and the local McDonalds. The results came back two weeks later – and they were positive for PFOA. My mom's house had the highest at 540 ppt; mine was 460 ppt. At that point, I knew we had a big issue.

Over the next 7 months, I worked with an environmental attorney out of Albany to look into the issue. He reached out to Judith Enck, who was the EPA administrator of Region 2 under the Obama Administration at the time.

Ms. Enck came in and right away basically cut off the entire village from drinking the water. Shortly after that, the village became a Superfund site. To date, there's been about \$30 million spent in Hoosick Falls on updating filtration, blood testing, and remediation. We're still looking for an alternate water source, so there's still things to be done, but it's been a long process.

That's why I'm here today to ask the EPA to do better to prevent contamination in the first place. We need improvement in water infrastructure and to pay more attention to monitoring these chemicals. From what I've observed, this current administration is not as aggressive as the previous one. I met with Director Ross earlier this year and I was unimpressed with the lack of urgency that he gave this issue.

Like the new mayor of Hoosick Falls, I view the EPA's so-called action plan for PFAS to be more of an inaction plan that further delays regulating these toxics. For example, the plan would delay determining if the EPA could possibly regulate PFAS under the Clean Water Act until 2021. The science is clear that we need to protect our water sources now from further pollution from these dangerous chemicals. We should limit PFAS discharges to water bodies by adding PFAS limitations to NPDES permits and developing ambient water quality criteria for PFAS.

The EPA is failing to do its job to protect us. We need a real action plan that treats this issue with the urgency and importance it needs. We need a plan that:

- Regulates PFAS immediately under the Clean Water Act;
- Cleans up the sources of contamination and contaminated water supplies;
- Makes the polluter pay for water contamination cleanup, including the military, which is responsible for many contaminated sites around the country;
- Sets enforceable standards for drinking water for the entire class of PFAS chemicals;
- Provides funding to help communities like Hoosick Falls provide safe water; and
- Provides training for healthcare professionals and medical monitoring in impacted communities.

We need Congress to step up to make sure that smaller communities like Hoosick Falls are taken care of and that they're safe. These illnesses are real. They're affecting people every day.

Thank you for the opportunity to testify today.

### **Hoosick Falls Background**

Hoosick Falls, a village of 3,500 people northeast of Albany, has become one epicenter of growing concerns around perfluorooctanoic acid (PFOA), an industrial chemical used to make Teflon. It has been called New York's Flint.

In 2014, testing revealed high levels of PFOA in the drinking water. The majority of samples revealed PFOA levels exceeding 600 ppt, which was far higher than the EPA health advisory of 400 ppt at the time. Today the advisory level is 70 ppt, and there is evidence that this level is still far too high. Blood testing results were similarly alarming. Many residents were found to have PFOA levels in their blood that were 100 times the national average.

The source of the contamination appears to be a nearby plastics factory, now operated by Saint-Gobain Performance Plastics, which used PFOA in its manufacturing process. Groundwater under a Saint-Gobain plant was found to have PFOA levels at 18,000 ppt. The EPA has added the Saint-Gobain Performance Plastics site to its Superfund National Priorities List of the most hazardous waste sites in the country, which requires the agency to ensure that the contamination is cleaned up.

Hoosick Falls is still waiting on a real plan to connect to a new, safe municipal water supply.

### **PFAS Background**

Per- and polyfluorinated compounds (PFAS) are a group of lab-made chemicals first created in the mid-twentieth century that have caused widespread water and food contamination. PFAS are often referred to as "forever chemicals" due to their virtually nonexistent natural breakdown over time. As local, state and federal agencies expand testing for PFAS, we are beginning to understand the true scale of the problem. They are found in hundreds of locations across the country, affecting the water supply for millions of Americans.

PFAS have been used to coat a wide range of products to protect against heat, chemicals and corrosion, and they have been used in aqueous film-forming foam to extinguish petroleum fires. While their stable chemical structure and ability to repel both water and oil makes them attractive for a wide variety of applications and products, these characteristics are also the very ones that have led to their widespread contamination of the environment and people.

PFAS chemicals have been found in nearly the entire U.S. population, and a growing body of science has been documenting their toxicity and public health impacts. A 2003 to 2004 survey

by the U.S. government estimated that over 98 percent of the U.S. population had detectable levels of PFAS in their blood.

PFAS is a big chemical family. As of 2018, at least 478 PFAS chemicals had been reported to the EPA as being used in U.S. commerce. Other sources report that thousands of PFAS chemicals have been produced and used by various industries, in both the United States and around the world. The most studied and pervasive forms are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).

- PFOA has been used in the production of the chemical polytetrafluoroethylene (PTFE), best known by the brand name Teflon, which was first synthesized in 1938 by a DuPont scientist and came into widespread use in the 1960s. The compound also has been used in waterproof textiles, electrical wire casing and more.
- PFOS has also been used in the production of everyday household items. One of the most well-known products that contained PFOS was 3M's line of Scotchgard stain repellants. PFOS also has been used in pesticides, surface coatings for carpets, furniture, waterproof apparel and paper goods.

Recent reports show that new generations of PFAS, such as GenX, have been on the rise, with concentrations vastly exceeding those of the legacy PFAS chemicals. Despite claims of low bioaccumulation, emerging PFAS chemicals are as environmentally persistent as their predecessors. Additionally, there is evidence that these newer chemicals can break down to form their legacy counterparts.

While awareness of these substances seems to have gained momentum in the last few years, evidence of their stubborn persistence and toxicity has been around since the late 1960s and 70s, only to be overlooked until relatively recently. This resulted in delayed intervention, allowing the continued release of the substances into the environment.

### *Toxicity*

PFAS chemicals pose serious risks to human health, and emerging evidence indicates that even very low levels of PFAS exposure may not be completely safe for human health, particularly vulnerable populations such as infants. Infants may be especially vulnerable because of PFOA contamination of breast milk and because of their higher intake of water relative to their body weight. PFOA and related substances have been found in human maternal and cord blood in North America and abroad.

There are a number of well-documented health effects associated with exposure to PFOA and other PFAS chemicals: high cholesterol; thyroid disease; reproductive effects, including decreased fertility and pregnancy-induced hypertension; decreases in birth weight; adverse impacts on the liver and on the immune system; decreased vaccine response; ulcerative colitis; and neurobehavioral effects such as attention deficit hyperactivity disorder (ADHD).

PFAS chemicals may cause cancer. The World Health Organization's cancer research arm, the International Agency for Research on Cancer, classifies PFOA as a Group 2B carcinogen, or "possibly carcinogenic to humans." The U.S. EPA concludes that there is "suggestive evidence" of carcinogenicity of PFOA in humans. Highly exposed humans were observed to have correlating increases in testicular and kidney cancer.

### *Water Treatment*

According to the EPA's Drinking Water Treatability database, PFOA and PFOS can be removed by up to 99 percent by processes such as granular activated carbon, membrane separation, ion exchange and powdered activated carbon. Aside from these technologies, PFAS removal is resistant to many, if not most, water treatment processes, while other technologies may in fact increase their concentrations. Other processes, such as powdered activated carbon, are effective at removing older PFAS chemicals, but become less effective with newer forms of PFAS, many of which are replacing the older "legacy" types of PFAS.

### *Weak regulations*

PFAS are not currently regulated under the Clean Water Act, and there is no enforceable federal standard for PFAS chemicals in drinking water under the Safe Drinking Water Act. Information on industrial PFAS releases is sparse. Facilities are not required to test for or report PFAS wastewater discharges since the EPA has not classified any of these chemicals as toxic pollutants or hazardous substances under the Clean Water Act.

The EPA has established a lifetime drinking water health advisory level of 0.07 micrograms per liter (mg/L), or 70 ppt, for PFOA and PFOS, but it has not yet issued an enforceable Maximum Contaminant Level for drinking water. The health advisory level falls short not only in lack of effectiveness, but in stringency. Emails disclosed in early 2018 found that the EPA suppressed a scientific assessment of PFASs from a federal health research agency that recommended a much more stringent level of protection that was nearly 7 to 10 times lower than the EPA's health advisory.

### **The EPA Needs a Real Plan of Action**

As we begin to understand the scope of the problem, emerging research tells us that there are no 'safe' levels of PFAS in our drinking water. The EPA's PFAS Action Plan announced in February fails to implement immediate limits to effectively regulate PFOA and PFOS, or other PFAS. In addition, there are concerns about conflicts of interest within the agency. David Dunlap, a former Koch Industries official, runs the EPA's research arm that will shape regulations for dangerous chemicals in our water, such as PFAS. This raises red flags because Koch Industry's Georgia Pacific company is facing at least one class action lawsuit in Michigan related to PFAS contamination,<sup>1</sup> and as of February 2019, a company spokesperson said it may still be manufacturing products with these chemicals.<sup>2</sup>

The EPA needs a real plan of action that immediately protects people and the environment from these dangerous chemicals:

- 1) The EPA must regulate PFAS under the Clean Water Act requiring enforceable effluent limits in NPDES permits and developing ambient water quality criteria for PFAS.
- 2) The EPA must regulate PFAS under the Safe Drinking Water Act by setting enforceable limits on PFAS in drinking water as soon as possible.
- 3) The EPA must regulate all PFAS chemicals as a class, rather than individually. Because of the number of different chemicals that are PFAS, considering them as individual chemicals will require too many resources and too much time. After decades of delay and widespread exposure by a large portion of the population, action is urgently needed and the fastest way to tackle this issue is to regulate PFAS chemicals as a class.
- 4) Due to widespread PFAS contamination of water supplies nationwide, the EPA must allocate funds to states and municipalities for the testing and any needed treatment of drinking water from community water systems and individual household wells. If treatment or groundwater remediation is untenable or unsuccessful, support should be provided to connect systems and households to alternative water supplies. Congress should provide federal funding to ensure that every household has access to clean, PFAS-free water.
- 5) To assist communities in assessing the extent of the contamination of their water systems, EPA should provide guidance on testing for PFAS and investigate the possibility of using a broader screen, such as total organic fluorine level.
- 6) The EPA must research water treatment technologies that address the removal of the newest generation of PFAS.
- 7) The EPA should provide guidance and resources to test individual household water wells for PFAS contamination, and the Agency should provide support for nonprofit technical assistance to households and small community water systems to test and remove PFAS from drinking water.
- 8) The EPA should ban the use of sewage sludge (biosolids) as a soil amendment.
- 9) The EPA must more clearly communicate information about health risks to the public, particularly regarding new generation PFAS chemicals.
- 10) The EPA must do a better job at monitoring these emerging contaminants and informing the public of their prevalence and toxicity. The EPA collects data for six types of PFAS, including PFOA and PFOS. However, there are hundreds of PFAS that are documented in

U.S. commerce that lack sufficient environmental and health data. Emerging PFAS contaminants like GenX and others, used to replace legacy chemicals, have growing, but still relatively little, data on their prevalence in the environment and their toxicity.

- 11) The EPA should designate PFAS as Hazardous Substances under CERCLA.
- 12) The EPA should finish the recommendations for contaminated sites, including providing guidance on water treatment technologies.
- 13) The EPA should provide support for communities dealing with contaminated sites, including establishing biomonitoring and medical monitoring programs, as well as education for medical professionals in impacted communities.
- 14) The EPA should expand its PFOA Stewardship Program to work toward the complete elimination of all new manufacturing and import of all types of PFAS chemicals, including newer generation, shorter-chain compounds, to prevent further contamination.

The American people have been exposed to these toxic chemicals for decades without any safeguards. It's beyond time to start the work to address this crisis. Our country deserves an urgent and comprehensive response to this crisis.

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<sup>1</sup> Barrett, Malachi. "Lawsuit alleges 3M and Georgia-Pacific caused Parchment PFAS emergency." MLive. November 21, 2018.

<sup>2</sup> Snider, Annie. "Former Koch official runs EPA chemical research." *Politico*. February 4, 2019.