



**American Water Works  
Association**

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## **Examining Legislation to Address the Risks Associated with Per- and Polyfluoroalkyl Substances (PFAS)**

**Presented by  
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**Before the Senate Committee on Environment and Public Works  
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Good morning, Chairman Barrasso, Ranking Member Carper, and members of the committee. My name is Tracy Mehan, and I am Executive Director for Government Affairs for the American Water Works Association, or AWWA, on whose behalf I am speaking today. I appreciate this opportunity to offer AWWA's perspectives on the many issues surrounding per- and polyfluoroalkyl substances, or PFAS.

AWWA's 50,000 members represent the full spectrum of water utilities – small and large, rural and urban, municipal and investor-owned. We are an international, non-profit, scientific and educational society dedicated to protecting public health through the provision of safe drinking water. While AWWA is primarily a drinking water association, about 60 percent of our utility members are dual utilities, that is they have a division of drinking water and a division of

wastewater and possibly stormwater as well. I speak not only from the perspective of AWWA, but as a former state and federal regulator and an adjunct professor of environmental law.

AWWA would like to bring to the committee's attention several issues regarding PFAS. We understand the committee's concerns that PFAS compounds may pose both human health and ecological risks that warrant greater attention and management. The number of bills introduced regarding PFAS and the variety of issues they address illustrate the breadth of concern over these compounds.

PFAS compounds are a group of more than 3,000 man-made chemicals manufactured in the United States and other countries since the 1940s. The U.S. Environmental Protection Agency (EPA) reports that more than 1,200 PFAS compounds have been used in commerce, and that about 600 are still in use today. They may be found in food packaging, non-stick products, stain- and water-repellent products, fire-fighting foams, polishes, cleaning agents and other commercial products. The most well-known and common of these compounds are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). Related compounds are also causing concern: perfluorononanoic acid (PFNA), perfluorohexanoic acid (PFHxA), perfluorohexanesulfonic acid (PFHxS), perfluorodecanoic acid (PFDA), perfluorobutanesulfonic acid (PFBS) and fluoropolymers made through the process known as GenX. Much of our current data is focused on legacy PFAS compounds that are no longer manufactured, such as PFAS and PFOA.

Currently 12 states have policies in place regarding PFAS compounds and drinking water, with three more developing policies. Also, 17 states have source water protection policies for PFAS, and at least one more state is developing such policies. One state, New Jersey, has a maximum contaminant level, and several have MCLs in development.

## **Use of Existing Authorities to Address PFAS**

Drinking water utilities and state environmental agencies need to know where to focus monitoring resources to understand what risks may be in source waters. We need to know where PFAS compounds have been produced and in what volumes. There are existing tools that EPA could be using to a greater degree to help address such concerns regarding PFAS. In particular, there is the Toxic Substances Control Act (TSCA). TSCA has data-gathering authority that the agency could use to garner more information from the manufacturing sector about the number of PFAS compounds that have been developed, in what quantities they were produced and where they were produced. TSCA data indicates that manufacturers have already discontinued the use of a number of PFAS compounds, but state and local risk managers need more information than is currently available to manage legacy compounds and proactively manage PFAS that are currently in use. Deploying TSCA authorities in the service of safe drinking water is “source water protection” at the strategic level.

Utilizing its oversight authority over federal agencies, we urge Congress to work closely with EPA career staff to ensure that the agency takes advantage of existing authorities under TSCA and the Safe Drinking Water Act to manage risks posed by PFAS compounds. Using such authorities, the agency needs to:

- provide a report in one year and update it every two years describing
  - the location of current and past PFAS production, import, processing and use in the United States for individual PFAS compounds based on data collected through TSCA;

- o appropriate actions taken or planned under TSCA to restrict production, use and import of PFAS and support improved risk communications with the public;
- o actions taken by other federal agencies, and in particular the departments of Defense and Health and Human Services, to address PFAS concerns; and
- o summarizes statutory and non-statutory barriers encountered in gathering and distributing information on PFAS in order to inform risk management decisions by EPA, states and local risk managers.

We understand the significance for designating some PFAS compounds as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). However, we must flag some unintended consequences of such actions that need to be evaluated.

Wastewater utilities receive and treat water from a range of sources from homeowners to industries. That water may contain PFAS compounds. Even though they are not the source of these compounds, wastewater or stormwater utilities could end up liable for cleaning up these substances. If biosolids from wastewater treatment plants have been applied to land as fertilizer, such liability increases. Removing PFAS from wastewater requires advanced technologies, such as granular activated carbon, ion exchange or reverse osmosis. Then, as with advance drinking water treatment techniques, there is the issue of how to dispose of the concentrated PFAS mix.

The Clean Water Act (CWA) comes into play as well. Information gleaned via TSCA to target assessments of PFAS in the environment will assist development of industrial pre-treatment actions under that act. CWA authority will also come into play in the development of analytical

methods for PFAS in industrial wastewaters and in development of appropriate and reliable treatment methods.

## **PFAS Action Plan**

EPA released its PFAS Action Plan earlier this year. While we saw some positive steps promised in that plan, we believe authorities exist for federal entities to do even more. Agency officials have provided briefings on that plan, so I will not repeat it in detail. EPA officials promised progress under the Safe Drinking Water Act's (SDWA's) process for developing drinking water standards, beginning with making proposed regulatory determinations for PFOA and PFOS this year. We urge Congress to support EPA's Office of Water, particularly in appropriations, as it works through the rule determination process. It was monitoring under the SDWA's unregulated monitoring requirements that set the stage for the current PFAS policy debate. EPA will require a second round of monitoring for additional PFAS in the upcoming fifth round of the Unregulated Contaminant Monitoring Rule. In late April, EPA proposed interim clean-up guidelines for PFOA and PFOS under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA). EPA also has a process under way to determine if PFOA and PFOS can be listed as hazardous substances under CERCLA. Equally important, EPA committed itself to improving risk communication for PFAS compounds. Members of the public and policymakers such as yourselves are understandably concerned about the unknown risks associated with a group of contaminants that is both manmade and is seemingly an avoidable risk. Effective risk communication is significant to addressing these concerns.

With regard to the federal drinking water standard setting process, we understand that this process can be frustratingly slow. However, a scientific, risk-based and data-driven process that discerns what substances are to be regulated, and at what levels, is indeed going to take a

significant amount of time. We caution against setting a precedent of by-passing these established processes via legislative action. The nation tested that approach with the 1986 Amendments to the SDWA with untoward results (see attached appendix). That said, we are eager to follow the data on PFAS compounds wherever it may go in the investigative process so that we may know how to best protect public health. We will then prepare our members to comply with any new regulations.

Removing PFAS compounds from water typically requires treatment techniques such as filtration through granular activated carbon or ion exchange. While these advanced technologies can be effective, they are also expensive, and generate waste streams that require specialized disposal methods that are not readily available across the country.

AWWA members are looking for a cohesive risk management strategy that addresses legacy compounds and ensures that current and future PFAS compounds are not a threat to the country's water supplies. We are concerned that states are considering MCLs for PFAS compounds over a range of values that will have markedly different treatment implications, sometimes without adequate benefit-cost analysis. This makes intelligible, accurate, defensible risk communication impossible. Drinking water standards are part of a holistic risk management strategy.

In our 2012 study, *Buried No Longer*, AWWA determined that the United States needs to spend about \$1 trillion over 25 years to maintain and expand our current level of water service. Therefore, over time, regulatory actions needs to be prudently implemented to avoid aggravating affordability issues for customers, particularly those with low incomes. AWWA's biennial rate survey found that during the period between 2016 and 2018, charges increased 7.2% for water and 7.5% for wastewater, outpacing inflation by 3 percentage points. This follows

a larger trend, whereby water rates have more than doubled the pace of inflation since 2014. Water systems across the United States are striving to provide the best water quality possible at a reasonable cost to their customers. Investing in a treatment requirement based on inadequate information can leave fewer resources to address other known risks, such as failing infrastructure or lead service line replacement.

## **Research**

Research is key in addressing PFAS. The lack of health effects data on substances such as PFAS compounds has long held back regulatory determinations under the SDWA. Before a substance can be regulated, the SDWA requires that it “is known to occur or there is a substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern; and in the sole judgment of the Administrator, regulation of such contaminant presents a meaningful opportunity for health risk reduction for persons served by public water systems.”

Last year the Agency for Toxic Substances and Disease Registry observed “The toxicity of perfluoroalkyl compounds, particularly PFOA and PFOS, has been extensively evaluated in humans and laboratory animals. However, comparison of the toxicity of perfluoroalkyls across species is problematic due to differences in elimination half-lives, lack of adequate mechanistic data, species differences in the mechanism of toxicity for some endpoints, and differences in measurement of exposure levels between epidemiology and experimental studies. Substantial differences in the rate of elimination of perfluoroalkyls exist across species. ... The mechanisms of toxicity of perfluoroalkyl compounds have not been fully elucidated.” In this report, ATSDR was only able to propose reference doses for four out of fourteen of the more extensively studied PFAS compounds.

Research to provide information necessary to make informed risk management decisions is expensive and has been inadequately funded. Dr. Linda Birnbaum, director of the National Institute of Environmental Health Sciences and the National Toxicology Program, pointed to this fact last fall when she testified to the Senate Committee on Homeland Security and Government Affairs, saying "While we have studies that indicate adverse health effects due to PFOA and PFOS exposure, we do not have strong data on which to base conclusions for the great majority of thousands of PFAS and we have only limited findings that support the following adverse health effects.

"PFAS" is a grouping of chemicals with a large array of chemicals with different structures and thus different chemical properties that impact developing analytical methods, their fate in the environment, the effectiveness of different treatment technologies, as well as how they degrade (and into what). To effectively manage PFAS the environmental engineering community need information to guide design and operation of treatment technologies. In particular research is needed to support quantification in environmental media and sustainable strategies for removal of PFAS of concern from waters and wastewaters.

Further research is needed in these areas:

- Health effects data to identify which PFAS compounds pose a human health risk;
- Analytical methods to quantify levels of PFAS compounds in environmental samples (natural waters, wastewaters, soil, finished water);
- Technologies to economically destroy PFAS compounds in wastes from drinking water and wastewater treatment so that these long-lived chemicals are not re-introduced into groundwater or surface waters; and
- Technologies to cost-effectively remove problematic PFAS compounds from drinking water and wastewaters to levels that do not pose public health concerns.

We urge Congress to ensure that the EPA and other relevant agencies or research bodies have the tools and resources they need to answer the needs listed above.

### **Setting Achievable Expectations**

It is important that the Committee request and examine technical and economic analysis from career staff at EPA before proceeding with any legislation to regulate PFAS compounds. For example, the Safe Drinking Water Act framework does not require a binary decision between setting standards for individual compounds one-by-one, and requiring treatment for all "PFAS" as a class. Taking steps to control PFAS exposure will shift public resources from other essential tasks. To do so warrants understanding the practical implications of legislative language. AWWA recommends the Committee allow EPA to develop regulations and guidance that target steps that provide a meaningful opportunity for health risk reduction.

AWWA and water systems across the United States are committed to providing high-quality drinking water and protecting consumers from demonstrable risks. To assure that PFAS risks are effectively and efficiently reduced, these compounds must be properly addressed within the scientific framework of the SDWA. Water systems also need Congress to work with EPA to ensure that the agency has the funding to properly execute its work under all of the available statutes to protect our nation's water resources.

Finally, I want to note that AWWA and the Centers for Disease Control and Prevention recognized "Drinking Water Week" early this month. The theme this year was, "Protect the Source." I hope that the discussions at this hearing and the discussions this hearing generates

will help us all do more to protect our sources of drinking water from substances posing a threat to human and environmental health.

### **G. Tracy Mehan, III**

G. Tracy Mehan, III, became AWWA's Executive Director for Government Affairs in August 2015. Before that, he was a principal with The Cadmus Group, Inc., an environmental consulting firm. Mehan served as Assistant Administrator for Water at the U.S. Environmental Protection Agency from 2001 to 2003, directing both the Safe Drinking Water Act and Clean Water Act programs. He developed new policies and guidances on watershed-based permitting and water quality trading. He also promoted and expanded ambient water quality monitoring and innovative approaches to meeting the challenge of the infrastructure financing gap. Mehan served as director of the Michigan Office of the Great Lakes (1993-2001) and as Associate Deputy Administrator of EPA in 1992. He served as director of the Missouri Department of Natural Resources from 1989 to 1992, managing the state's environmental, parks, historic preservation, geology and other programs. He represented Missouri in all negotiations over the management of the Missouri River. Mehan is a graduate of Saint Louis University and its School of Law. Mehan is an adjunct professor in environmental law at George Mason University School of Law.

### **What is the American Water Works Association?**

The American Water Works Association (AWWA) is an international, nonprofit, scientific and educational society dedicated to providing total water solutions to protect public health and assure the effective management of water. Founded in 1881, the association is the largest organization of water professionals in the world.

Our membership includes more than 3,900 utilities that supply roughly 80 percent of the nation's drinking water and treat almost half of the nation's wastewater. Our 50,000 members represent the full spectrum of the water community: public water and wastewater systems, environmental advocates, scientists, academicians, and others who hold a genuine interest in water, our most important resource. AWWA unites the diverse water community to advance public health, safety, the economy, and the environment.

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**Appendix to prepared statement by G. Tracy Mehan, III.**

“The statute should be amended to eliminate the requirement that National Primary Drinking Water Regulations be established for 25 new contaminants every three years. Instead, new regulated contaminants would be selected based on whether their health risk, occurrence, and comparative risk from other exposure pathways warrant regulation.”

- Prepared statement from June Swallow, former Director of the Rhode Island Department of Health’s Division of Drinking Water Quality, Senate Committee on Environment and Public Works, 1993

“The 1986 Amendments to the SDWA require EPA to issue national primary drinking water regulations for 83 specified contaminants and for 25 additional contaminants every three years. This rigid “25 every 3 years” statutory requirement outpaces the Agency’s ability to critically assess whether there are public health threats posed by thousands of contaminants that may appear in drinking water before developing regulations. Under the present statutory scheme, future regulations may not be aimed at the highest priority public health risks, potentially increasing the already significant regulatory burden on EPA, the States and public water systems with only marginal benefits. In time of constrained resources, EPA needs the flexibility and time to select contaminants for regulation that pose real public health risks. As an alternative to the “25 every 3 years” mandate, the Administration recommends that EPA more thoroughly evaluate public health risks before regulations are developed.”

- Prepared statement from Robert Perciasepe, EPA Assistant Administrator for Water, House Subcommittee on Environment, Energy, and Natural Resources, 1994.

“The current requirement to regulate 25 new contaminants every 3 years needs to be replaced with a scientifically defensible, risk-based approach. The current regulatory treadmill dilutes limited resources on lower priority contaminants, and as a consequence may hinder more rapid progress on high priority

contaminants. A new selection process should maintain a mandatory duty to collect data, conduct research, and make publicly accountable decisions on whether or not regulations are needed. This approach would be less rigid than the “25 every 3 years” requirement from the 1986 SDWA amendments, but would not revert to the pre-1986 policy, which failed to ensure timely research and contaminant selection.”

- Prepared statement from Robert Perciasepe, former Assistant Administrator for the EPA Office of Water, House Subcommittee on Health and Environment, 1996

