

PFAS: The View From Drinking Water Utilities

G. Tracy Mehan III



Author's note: On June 9, 2021, I testified on behalf of AWWA to the US Senate's Committee on Environment and Public Works on the topic of per- and polyfluoroalkyl substances (PFAS). The following are edited excerpts from that testimony.

Drinking water utilities and state environmental agencies need to know where to focus monitoring efforts to understand what risks may be in source waters. To do that, we need to know where PFAS compounds have been produced and in what volumes. There are existing tools that the US Environmental Protection Agency (USEPA) could be using to a greater degree to help address these concerns. For example, the Toxic Substances Control Act (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, and where and in what quantities they were produced. Present TSCA data indicate that manufacturers have already discontinued the use of a number of PFAS compounds, but state and local risk managers need more information to manage legacy compounds and to proactively manage PFAS that are still in use. Deploying TSCA authorities in the service of safe drinking water is "source water protection" at the strategic level.

The Clean Water Act (CWA) can come into play as well. Information gleaned via TSCA to target assessments of PFAS in the environment will assist in the development of industrial pretreatment actions under that act. CWA authority will also impact the development of analytical methods for PFAS in industrial wastewaters and in development of appropriate and reliable treatment methods.

USEPA has yet to take substantial action under TSCA or the CWA, but it instead recently proposed a rule that places the responsibility on public water systems to take the lead on identifying potential sources of PFAS in the environment. This will once again place the burden on public water systems—and their customers—to address the PFAS issue that was borne by polluters. Using TSCA's authorities, USEPA should 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;
- appropriate actions taken or planned under TSCA to restrict production, use, and import of PFAS and support improved risk communications with the public;

- actions taken by other federal agencies, and in particular the Departments of Defense and Health and Human Services, to address PFAS concerns; and
- a summary of statutory and nonstatutory barriers encountered in gathering and distributing information on PFAS to inform risk management decisions by USEPA, states, and local risk managers.

Better Understanding the Risk

Research is key to identifying substances for potential regulation. The lack of clear data on the health effects of most substances has long held back regulatory determinations under the Safe Drinking Water Act, which requires that a substance be known to, or likely to, occur in public water systems with a frequency and at levels of public health concern. The act requires the regulation of such contaminants to present a meaningful opportunity for health risk reduction.

Different substances have unique structures and unique chemical properties that impact the development of analytical methods, their fate and degradation in the environment, and the effectiveness of different treatment technologies. To effectively manage new contaminants, the environmental engineering community needs each piece of information to guide design and operation of treatment technologies.

For the water industry to have an effective PFAS response, extensive research programs are needed in these areas:

- Health effects data to identify substances that pose a human health risk
- Analytical methods to quantify levels of such contaminants in environmental samples (natural waters, wastewaters, soil, finished water)
- Technologies to cost-effectively remove problematic contaminants from drinking water to levels that do not pose public health concerns
- Waste management strategies to ensure contaminated wastes can safely be managed

It is important that the Committee on Environment and Public Works request and examine technical and economic analyses from career staff at USEPA before proceeding with any legislation to regulate PFAS. 💧

G. Tracy Mehan III is executive director of the AWWA Government Affairs Office in Washington, D.C. He can be reached at tmehan@awwa.org.

<https://doi.org/10.1002/awwa.1762>