August 29, 2022

Stacy Murphy
Operations Manager
Office of Science and Technology Policy (OSTP)
Eisenhower Executive Office Building
725 17th Street NW
Washington, D.C 20500

RE: RFI Response: PFAS Strategic Plan

Dear Stacy Murphy,

On behalf of the Water Quality Association (WQA), we would like to express our support to the department for further coordinating a federal response to per- and polyfluoroalkyl substances (PFAS) in drinking water and the environment. Recognizing gaps in research and development to address these chemicals will be vital in identifying and treating PFAS to ensure the health and safety of the American people.

WQA and the broader scientific community, the Environmental Protection Agency (EPA), and the agency's Science Advisory Board (SAB) have raised concerns over the long-term health and environmental impact PFAS has on drinking water and the public. Considering EPA actions and the agency's PFAS Strategic Roadmap and updated interim Health Advisory (HA) for these chemicals, it is worthy to note the feasibility of treatment and detection technology.

Many factors influence the ability to identify and treat PFAS in drinking water. As PFAS are a large family of man-made chemicals used in various household, commercial, and industrial applications, the contaminant's characteristics largely depend on the chemical composition of these substances. The basic structure of PFAS consists of a carbon chain bonded to fluorine attached to other elements and functional groups (such as alcohols, carboxylic acids, sulfonic acids, etc.). The chemical bond between carbon and fluorine is one of the strongest in organic chemistry making them resistant to degradation and persistent, meaning these "forever chemicals" accumulate in the environment and your body over time. Branched isomers also play a role in the type of PFAS present, these are often separated into two categories – long-chain PFAS typically consisting of a carbon chain of seven or more, and short-chain PFAS holding less than six. Other factors including the spatial arrangement of these groups can influence the strength and energy associated with PFAS, referred to as Steric Hindrance. These aspects of PFAS and other environmental factors greatly impact the ability to identify and remove drinking water contaminants.

2375 Cabot Drive
Lisle, Illinois 60532-3696 USA
Phone 630-505-0160
Fax 630-505-963
https://wqa.org/

Due to the variations of PFAS chemical structures, there is considerable research needed to investigate factors that impact the efficacy of water treatment systems and development of laboratory methodologies for detection at the health advisory levels. In response to question 3 of the RFI, the association recommends scientific research to examine the efficacy of removal technologies in relation to the chemical structure of PFAS, including the impact of steric hindrance, natural organic matter, and pH.

We encourage OSTP to engage with NSF International Joint Committee on Drinking Water Treatment Units (DWTU) Task Group on PFAS to understand the industry's current capabilities. This is where consensus-based standards are developed through the American National Standards Institute (ANSI) process to which these technologies are tested and certified for PFAS reduction, along with many other drinking water contaminants.

Increasing research and development in these areas will position the government, public, and water treatment industry to properly address PFAS in drinking water. Funding scientific research and investing in public-private partnerships are pillars of advancing the betterment of society. The Water Quality Research Foundation (WQRF) is a universally recognized independent organization that conducts and funds scientific research on subjects relating to the water quality improvement industry. Since 2016, WQRF has funded over $1.5 million in research aimed at advancing knowledge and the science of high-quality, sustainable water and plans to fund more than $3 million in data collection and research projects through academia and environmental consultants. WQRF has already made progress in understanding the broader scope of drinking water contaminants and would welcome the opportunity to work alongside the EPA and the federal government to support the research and the development of water treatment products that already play a vital role for many individuals, households, and businesses to improve their drinking water quality.

In response to this challenge, it is crucial that federal activities and research support scientific and technological capabilities for remediation. Thank you for your consideration of these recommendations and we hope to continue serving as a valuable resource to OSTP and the broader scientific community moving forward.

Best regards,

Jeremy Pollack,
Director of Government Affairs
Water Quality Association

2375 Cabot Drive
Lisle, Illinois 60532-3696 USA
Phone 630-505-0160
Fax 630-505-963
https://wqa.org/

About WQA

WQA is a not-for-profit trade association representing the residential, commercial, and industrial water treatment industry with over 2,500 members worldwide. Since its creation in 1974, WQA has worked tirelessly to improve water quality through sustainable technologies and services. Our members are manufacturers, dealers, and distributors who specialize in point-of-use (POU) and point-of-entry (POE) water filtration systems, which treat water at the tap or entry point of a home or building. WQA also operates an American National Standards Institute (ANSI) accredited testing and certification laboratory that certifies water filtration products to nationally accepted industry standards for contaminant removal.

2375 Cabot Drive
Lisle, Illinois 60532-3696 USA
Phone 630-505-0160
Fax 630-505-963
https://wqa.org/