







October 31, 2023

Jonathan Zwarg
Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, RI 02908

RE: Groundwater Quality Rules – 250-RICR-150-05-3

Dear Jonathan Zwarg,

On behalf of the Water Quality Association (WQA), American Supply Association (ASA), the International Association of Plumbing and Mechanical Officials (IAPMO), and NSF, we want to thank you for your commitment to ensuring the health and safety of Rhode Islanders through improving drinking water quality.

Establishing groundwater quality standards and preventive action limits for Per- and Polyfluoroalkyl Substances (PFAS) and monitoring water supplies is the first step in navigating drinking water challenges. However, regulating and responding to contamination is a complex task. When water quality standards are established, and areas of contamination are identified, the public will begin looking for ways to reduce these health contaminants or look to the state to provide short-term or long-term relief. Ensuring water supplies comply with new water quality standards can take some time, especially in rural communities which often rely on groundwater delivered through private wells; so, it is important for residents to have knowledge and accessibility of available technology. This includes understanding the feasibility of certain options such as point-of-use (POU) and point-of-entry (POE) water treatment systems; many of which are already playing a role in reducing PFAS in drinking water.

Final barrier technologies can be deployed immediately in response to public health concerns and are being utilized today in many households, businesses, and schools. POU systems are especially effective at reducing PFAS as well as other health-based contaminants. POU technologies currently used for this purpose include Filters and Reverse Osmosis (RO) systems. POU Filters often contain activated carbon, but typically other types of media (e.g., anion exchange media) are also added to improve the removal efficacy of PFAS. POE treatment for PFAS can be accomplished using anion-exchange systems, whole-house filtration, and whole-house RO systems.

Currently, two existing standards for third-party certified water filtration systems offer elective claims to reduce either total PFAS or individual specified PFAS; NSF/ANSI 53: *Drinking Water Treatment Units* – *Health Effects* and NSF/ANSI 58: *Reverse Osmosis Drinking Water Treatment Systems*. These standards were recently updated to allow for the verification that certified water filtration systems reduce either total PFAS to a cumulative 20 ppt, or certain individual PFAS to specified values. Total PFAS reduction is measured by the reduction of a mixture of seven PFAS compounds made up of PFOA, PFOS, PFHxS, PFNA, PFHpA, PFBS, and PFDA. As technology advances in PFAS detection, ideally, subsequent editions of these drinking water standards would continue to drive lower PFAS detection limits and an

¹ Zhou, Z. (2022). Emerging Contaminant Removal and Microbial Growth in POU Membrane Filtration and Activated Carbon. Unpublished manuscript. Purdue University. Retrieved from https://www.wqrf.org/completed-studies.html









increasingly comprehensive list of PFAS analytes. We recommend citing these standards in regulations and/or legislation since they play a crucial role in ensuring these systems reduce exposure to PFAS as intended.

We welcome the opportunity to help support the reduction of PFAS in groundwater and drinking water and would be willing to serve as a resource to Rhode Island. Thank you for considering this important matter and working to ensure the health and well-being of Rhode Islanders.

Sincerely,

Jordan Kari, Manager of Government Affairs, WQA Stephen Rossi, Vice President of Advocacy, ASA Jim Scarborough, Director of Government Relations, IAPMO Harold Chase, Director of Government Affairs, NSF









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.

About ASA

The American Supply Association is the national industry trade association representing distributors and their manufacturers and manufacturer representative agencies serving the PHCP & PVF channel. Serving wholesaler-distributors and their supply chain partners in the plumbing-heating-cooling-piping (PHCP) and industrial pipe-valve-fitting (PVF) industry, ASA is a one-stop-shop for legislative and regulatory advocacy, ongoing business intelligence, employee training and education and peer-to-peer networking.

About IAPMO

IAPMO was founded in 1926 by government officials in the US to protect public health and safety by developing the most progressive and technically advanced plumbing, mechanical and water efficiency codes in the world. A large part of IAPMO's work focuses on product testing for the industry. Our research and testing labs are capable of testing products to more than 400 standards and we provide testing to new plumbing products that enter the market every year. These include such devices as shower heads, faucets, and water filters. Our rigorous process includes following the criteria of the American National Standards Institute (ANSI) and the International Organization for Standardization (ISO).

About NSF

NSF is an independent, not-for-profit organization founded in 1944 in Ann Arbor, MI that develops consensus national standards, provides product inspection, testing and certification, auditing, education, and related services in public health and safety. The core purpose of NSF is to "protect and improve human and environmental health." NSF has a long history of working with the EPA, FDA, USDA, CDC, and health related governmental entities at the state and local levels, as well as international bodies. NSF is a Collaborating Centre of the World Health Organization for Food Safety, Water Quality, and Medical Device Safety. NSF/ANSI 53 and NSF/ANSI 58, American National Standards developed by NSF, allow for the certification of some point of use and point of entry drinking water treatment units to reduce the levels of specified contaminants in drinking water including lead.