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Submitted via the Federal eRulemaking Portal: <https://www.regulations.gov/>

May 30, 2023

Mr. Michael S. Regan, Administrator
U.S. Environmental Protection Agency, EPA Docket Center
Office of Ground Water and Drinking Water Docket, Mail Code 2822IT
1200 Pennsylvania Avenue NW
Washington, DC 20460

Subject:

**PFAS National Primary Drinking Water Regulation Rulemaking
Docket ID Number: EPA-HQ-OW-2022-0114**

To Administrator Regan and the U.S. Environmental Protection Agency:

The LSP Association (LSPA) is the 800-member, non-profit association of Licensed Site Professionals (LSPs) and related practitioners in the Commonwealth of Massachusetts. LSPs are the scientists, engineers, and public health specialists licensed by the Commonwealth to work on behalf of property owners, operators, and other involved parties to oversee the assessment and cleanup of oil and hazardous materials released to the environment - including per- and polyfluoroalkyl substances (PFAS). With the Massachusetts Department of Environmental Protection (MassDEP) and the Board of Registration of Hazardous Waste Site Cleanup Professionals (LSP Board of Registration), LSPs are the third “arm” of an innovative, privatized program created in 1993. The program has proven to be highly successful. LSPs have overseen the cleanup of over 45,000 sites in the past 30 years; they work with their government, non-profit, institutional, and private clients to remediate contaminated sites, so that these properties can be placed back into active and productive use.

The LSPA is keenly aware of the complex issues associated with PFAS; many of our members have been involved in the evaluation of PFAS in public and private water supplies, the investigation of potential sources of PFAS in the environment, and the remediation of PFAS sites. We are familiar with the challenges these persistent and widespread environmental contaminants present for both assessment and the identification of feasible cleanup options that are protective of human health and the environment.

MassDEP’s hazardous waste site cleanup regulations, known as the Massachusetts Contingency Plan or MCP (310 CMR 40.0000, *et seq.*), were amended in December 2019 with newly promulgated stringent numeric cleanup standards for PFAS in soils and groundwater. One year later, MassDEP also established Maximum Contaminant Levels in drinking water for six PFAS

contaminants. LSPA members interact closely with MassDEP as they work to identify the source and extent of PFAS contamination, to conduct cleanup actions, and to monitor exposure pathways that pose risks to public health and the environment. We all understand that the urgency and impacts from PFAS are real and significant and, as indicated by their informal “forever” nickname, persistent.

While this letter provides LSPA’s comments in accordance with the May 30, 2023 deadline imposed on comments on the proposed National Primary Drinking Water Regulation (NPDWR) under Docket ID: EPA-HQ-OW-2022-0114, we note that, with more time, the LSPA could provide additional insight and suggestions to further refine the regulation. While it appears that USEPA is not planning to extend the comment deadline, we encourage USEPA to solicit public comment once again on a subsequent revised version of the NPDWR before the rules are finalized.

A team of LSPA members including toxicologists, public health risk assessors, LSPs, and others with decades of experience have reviewed the proposed rule. We have organized our comments according to the topics outlined in the slides from EPA’s presentation, [Proposed PFAS National Primary Drinking Water Regulation \(epa.gov\)](https://www.epa.gov/propose/pfas-national-primary-drinking-water-regulation).

Slide 2: *Even though some specific PFAS have been largely phased out due to health and environmental concerns, they may still be found in the environment and in drinking water.*

- Much work is still needed in eliminating PFAS-containing products from the marketplace. “Some specific PFAS...” downplays the multitudes of products in use that still include PFAS compounds. It also downplays the decades of use of products used in accordance with labeling, as well as the disposal of these products in landfills, septic systems, wastewater treatment plants (WWTP) and other “receivers” of PFAS impacted effluent that may then impact underlying groundwater.
- Studies have been performed in several states (e.g., Vermont, New Hampshire, Maine, and Massachusetts) that have confirmed the presence of background levels of PFAS constituents in soil, presumably related to airborne deposition.
- Data collected by MassDEP indicate that approximately 5% of private wells tested across Massachusetts have PFAS exceeding the state health standards (20 ppt for the sum of six PFAS) even though there was no reported hazardous waste site/release identified in proximity.
- **The LSPA urges USEPA to not focus exclusively on setting very stringent MCLs for these constituents; attempting to limit the sources of these compounds in products will likely have significantly more of a public health impact as exemplified by the reduction in average PFOS (85%) and PFOA (70%) concentrations in blood levels following the phase out of these PFAS compounds (see below).**

Slide 5: *EPA is requesting comment on preliminary determinations to regulate PFHxS, PFNA, PFBS, HFPO-DA (commonly referred to as GenX Chemicals), and mixtures of these four PFAS.*

- It is unclear to the LSPA why PFBS, a short chain, “second generation” PFAS that is commonplace in groundwater and exhibits much lower toxicity relative to the other three PFAS compounds, was included in this grouped Hazard Index Approach. **We do not**

think there is technical justification for including PFBS in the Hazard Index Approach; the LSPA urges USEPA to consider setting an individual MCL for PFBS.

- The Hazard Index Approach is confusing to the lay person without risk assessment experience. **The LSPA urges USEPA to consider using a summed concentration approach for PFNA, GenX, and PFHxS** similar to that which MassDEP has employed for six PFAS compounds of similar toxicity (i.e., in Massachusetts, the MCL for the sum of the concentrations for these six PFAS compounds is 20 ppt). For PFNA, GenX, and PFHxS, using the current EPA toxicity values, a summed concentration of 10 ppt would be roughly equivalent to a Hazard Index of 1.

Slide 5: Concurrent with these preliminary regulatory determinations, EPA is proposing an NPDWR for these four PFAS as well as for PFOA and PFOS

- A model was used to estimate blood PFAS levels associated with a certain toxicity value. This was part of the calculation for deriving the MCLs and it includes numerous safety/uncertainty factors. The actual background levels of PFAS in blood have decreased over time since the prohibition of PFOS and PFOA in commercial products (cf. [PFAS in the US population | ATSDR \(cdc.gov\)](#)). Was this actual decrease in background blood PFAS level taken into account with the proposed MCLs?
- The decrease in PFAS blood concentrations observed by the CDC indicates that prohibition of PFAS in commercial products has significantly decreased potential PFAS exposures. **While the LSPA absolutely believes that public health should be protected by safe drinking water supplies, promulgating extremely low MCLs, at concentrations that are barely detectable by a laboratory, without significantly limiting their use in commercial products is a fruitless effort because there will continue to be more PFAS introduced into the environment.**
- There are significant hurdles for all stakeholders if USEPA proceeds with the proposed NPDWR. **The LSPA concurs with and wishes to amplify the implementation challenges identified by the Massachusetts Water Works Association (MWWA of Acton, MA) in their May 26, 2023 comment letter to USEPA regarding the proposed rule.** Of particular note are the sections related to Occurrence; Source Water and Analytical Variability; Analytical Methodology; Treatment Considerations; Liability Concerns; Supply Chain/Procurement; and Cost.

Slide 21: EPA is requesting comment on establishing the proposed rule trigger levels at 1/3 of the proposed MCLs and on alternative trigger levels such as 1/2 of the proposed MCLs.

- The trigger level of 1.3 ppt for PFOS/PFOA is below typical Reporting Levels for laboratories (which are generally 2 ppt). USEPA indicates that this trigger level is intended to determine presence/absence rather than a specific concentration; however, the trigger is established as a discrete value. It is not scientifically defensible to establish a threshold value well below the practical quantitation limit (PQL) where precision and accuracy cannot be reliably achieved. Typical Acceptance Criteria for PFAS surrogates are 70 to 130%. **The LSPA requests that USEPA consider establishing a trigger value that is 70% of the MCL (2.8 ppt for PFOS/PFOA if the MCL is set at 4 ppt),**

which would provide reasonable certainty that the compound is not present at a concentration exceeding the MCL and is above typical analytical reporting limits.

- There is a significant difference between sampling every quarter and sampling once or twice every three years. **The LSPA recommends that USEPA consider a more tiered approach to monitoring.**

Slide 27: Costs are assessed as the expenses incurred by public water systems to monitor for the six PFAS included in the NPDWR, install and operate treatment technologies, inform consumers, and perform record-keeping and reporting responsibilities. State (or primacy agency) costs are assessed as expenses incurred to administer and implement the rule.

- One serious LSPA concern is the fact that roughly 15% of the US (over 40 million people, based on USGS data) use private residential wells to supply their water. USEPA's proposed regulations do not address these drinking water supplies. Many towns are already linking private well standards (which must be met after drilling a new well or, oftentimes, prior to a transaction of a home with an existing well) to federal or state drinking water standards for metals and organic compounds. Because residential drinking water wells are often present where on-site septic systems are in use, a potential also exists for private well impacts as a result of PFAS discharges to residential septic systems. However, even private septic systems can result in concentrations of PFAS, particularly PFOA and PFOS, higher than the proposed PFAS MCLs. Public funds and grants are generally not available to private residents so costs for the installation, maintenance, and disposal of treatment materials would be borne by the homeowner.
- Based on some point of entry treatment (POET) installations that have been installed in Massachusetts, we estimate that the costs associated with a POET installation are between \$7100 - \$8600 (that breaks down to \$1,100 for the analytical data analysis + \$6,000 - \$7,500 for the system installation), with an annual maintenance cost of approximately \$500 to \$1600, not including additional analyses. With the anticipated increased demand for POET systems driven by the lowering of the MCLs, we anticipate that these costs will increase, and become a serious and perhaps insurmountable financial burden on individual homeowners.
- The LSPA agrees with the MWWA in their May 26, 2023 comment letter regarding regulated entities (p. 8): *“If PFAS is as dangerous as EPA is suggesting, we contend that the EPA and the states’ regulatory agencies should be as concerned about private well owners and bottled water consumers as they are about customers of PWSs and work with other governmental agencies to find the appropriate regulatory mechanisms to require PFAS protections for all water consumers.”*

Slide 29: EPA appreciates additional information and will use input received in public comments to inform the economic analysis for the final rule.

- In Section 2.1 of EPA-822-P-23-001, USEPA presents an evaluation of three alternatives for the enforceable MCL values for PFOA and PFOS:
 - 4.0 ppt in Option 1a;
 - 5.0 ppt in Option 1b, because it is 25 percent above the compliance quantitation limit of 4.0 ppt established for today's regulation; and

- 10.0 ppt in Option 1c, to provide information on whether the Agency should consider utilizing its authority under Section 1412(b)(6) to set an alternative MCL at the level at which the benefits would justify the costs.
- In the tables provided in Section 7.0, only Option 1c results in a net benefit (for quantified factors) using both the 3% and 7% discount rates. As noted in other LSPA comments, a significant portion of the costs associated with the proposed MCLs (which will also dictate standards for private drinking water wells, groundwater, and leachable soil) is not quantified in the economic evaluation, which only includes public water supplies. These costs are not listed in Table 7-5 as non-quantified costs that were considered. **As a result, LSPA urges USEPA to consider adopting the standard of 10.0 ppt (Option 1c) to more closely balance costs and benefits.**

Slide 30: EPA estimated annualized costs per year for water systems that treat or change water source: Costs of system capital, operation, and maintenance are annualized.

- The LSPA estimates that granular activated carbon (GAC) use will increase exponentially if the proposed MCLs are implemented. Adequate source materials (coal, coconut, sugarcane bagasse, soybean hulls, nutshell) are not available to meet the resulting demand; therefore, costs will increase accordingly. Did EPA consider the supply/demand issues and escalating costs associated with GAC?
- Communities that can least afford it, such as minority, low-income, and environmental justice populations will be disadvantaged if required to compete with more affluent communities and public water supply systems for dwindling resources.
- The LSPA concurs with the MWWA in their May 26, 2023 comment letter regarding supply chain and procurement challenges (pp.14-15).
- Public and private sector organizations in Massachusetts are experiencing a severe remediation waste disposal capacity crisis for all contaminants, not just PFAS. No new landfills are currently in the planning stages in Massachusetts, the hurdle of local municipal approval is daunting, and facility siting is a highly sensitive public issue. All of these factors would make it exceedingly difficult and expensive to find the additional capacity needed for disposal of the high volume of spent treatment media that would be generated by the proposed regulations. Again, the LSPA concurs with the challenges as presented in the MWWA May 26, 2023 comment letter (pp. 13-14).
- **The LSPA asserts that the resource capacity, supply chain availability of GAC and other treatment supplies, and laboratory capacity for undertaking compliance to these low MCLs has been greatly overestimated by USEPA.**

Slide 33: Bipartisan Infrastructure Law Funding for PFAS

- MassDEP data shows that 170 Public Water Suppliers (PWS) have detected PFAS above the state health standards, which is 20 ppt for the sum of six PFAS. That number is predicted to triple if USEPA's MCL is adopted. See the MWWA May 26, 2023 comment letter (pp. 6-7 and Graphic 3).
- **The LSPA believes that USEPA is overestimating the ability of the Bipartisan Infrastructure Law (BIL) to fund the significant, ongoing costs of implementing this proposed rule.** As the May 26, 2023 MWWA letter notes, *“While this funding is appreciated, it’s not nearly enough”* for what is needed to address the PWS PFAS challenges. Pages 15 – 17 of the MWWA letter present more specific information.

Overall, while the LSPA absolutely believes that safe drinking water supplies are imperative, **we urge USEPA to adopt the standard of 10.0 ppt (Option 1c) to more closely balance the costs and benefits of implementing this proposed rule. Simultaneously, the LSPA believes that the protection of public health will be much more effectively achieved by restricting the use of PFAS in consumer products.**

Thank you for the opportunity to provide these comments.

Sincerely,

THE LSP ASSOCIATION, INC.



Charles P. Young, LSP, President



Wendy Rundle, Executive Director

cc:

Commissioner Bonnie Heiple, MassDEP