

July 20, 2026

Submitted via regulations.gov

The Honorable Lee Zeldin, Administrator
U.S. Environmental Protection Agency
EPA Docket Center, Water Docket
Mail code: 28221T
1200 Pennsylvania Ave, NW
Washington, DC 20460

RE: Extending the Compliance Deadline for the PFOA and PFOS Maximum Contaminant Levels; Notice of Proposed Rule (EPA-HQ-OW-2025-1742)

Dear Administrator Zeldin:

On behalf of The Pew Charitable Trusts (Pew), thank you for the opportunity to provide comments on the Environmental Protection Agency's (EPA) proposal to extend the compliance deadline for compliance with Maximum Contaminant Levels (MCLs) and National Primary Drinking Water Regulations (NPDWRs) for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) under the Safe Drinking Water Act (SDWA).¹

Pew is a non-profit, nonpartisan research and policy organization dedicated to informing the public, improving public policy, and invigorating civic life with several initiatives related to the health and well-being of American communities, including Pew's safer chemicals project focused on reducing Americans' exposures to endocrine-disrupting chemicals (EDCs).

Overview

¹U.S. Environmental Protection Agency (EPA), "Extending the Compliance Deadline for the PFOA and PFOS Maximum Contaminant Levels Extending the Compliance Deadline for the PFOA and PFOS Maximum Contaminant Levels US Environmental Protection Agency," Federal Register 91, no. 97 (May 20, 2026):29425, <https://www.govinfo.gov/content/pkg/FR-2026-05-20/pdf/2026-10086.pdf>.

While Pew supports the Agency’s decision to retain the NPDWRs for PFOA and PFOS finalized in 2024, we disagree with the proposal to allow for widespread compliance deadline extensions that will delay health-protective action to reduce Americans’ exposure to PFOA and PFOS. The law provides opportunity for evaluating the need for compliance delays for specific utilities on a reasoned case-by-case basis. Any additional delay in implementation of drinking water limits on PFOA and PFOS allows for continued risks to human health as supported by the best available science.

We strongly recommend that EPA withdraw its proposed rule and partner with states to facilitate primacy over the PFAS-related regulations and subsequently provide case-by-case review of water systems’ needs as provided for under SDWA.

EPA’s Rulemaking for PFOS and PFOA Carefully Considered the Challenges That Utilities Would Face in Coming into Compliance

The nearly ubiquitous presence of PFOS and PFOA in water sources across the United States presents a significant challenge to many of the Community Water Systems (CWs) and Non-Transient Non-Community Systems (NTNCs) covered by the 2024 rulemaking. Many of these challenges were anticipated by the Agency prior to the rulemaking, however, and appropriate accommodation on compliance timing has already been made.

First, relying on the authority found in SDWA Section 1412 (b)(10), the Agency already allowed for a 2-year extension of time, moving what would have been the date for compliance from 2027 to 2029.²

Secondly, the Agency incorporated flexibilities into the 2024 rule, allowing utilities to use certain previously collected data to satisfy the initial monitoring requirements and allowing systems solely reliant on groundwater to complete initial monitoring on a semiannual rather than quarterly basis. As the Agency noted in the Federal Register notice finalizing the 2024 rule, “...all systems serving greater than 3,300 people will have appropriate monitoring data from UCMR 5” and “[m]any systems smaller than 3,300 people will also have appropriate monitoring

² *Ibid.*

data from state-led monitoring programs that may be eligible to meet the rule’s initial monitoring requirements....”³

As noted in the rulemaking notice, the Infrastructure Investment and Jobs Act (IIJA) sought to assist water systems with these challenges, providing, over a 5-year period, an additional \$11.7 billion for the Drinking Water State Revolving Fund, \$4 billion specifically aimed at emerging contaminants such as PFAS, and \$5 billion in grants for emerging contaminants in small or disadvantaged communities.⁴ With the disbursement of those funds in recent years, awards from multiple lawsuits,⁵ and state-initiated assistance programs,^{6,7,8} many utilities have already begun to address local PFAS contamination.

See, for example, various news items regarding treatment construction underway or completed at various utilities across the country:

- 2026, Bristol Township, PA⁹
- 2026, Broward County, FL¹⁰
- 2026, Buckingham, PA¹¹

³ U.S. EPA. “Per- and Polyfluoroalkyl Substances National Primary Drinking Water Regulation,” Federal Register 89, no. 82 (April 26, 2024):32532, <https://www.govinfo.gov/content/pkg/FR-2024-04-26/pdf/2024-07773.pdf>.

⁴ *Ibid.*

⁵ SL Environmental Law Group, “How PFAS Settlements and Litigation Are Helping Communities Close Infrastructure Funding Gaps,” *National League of Cities (NLC) Partnerships* 2025, <https://www.nlc.org/article/2025/11/10/how-pfas-settlements-and-litigation-are-helping-communities-close-infrastructure-funding-gaps/>.

⁶ Governor Kathy Hochul, “From Promise to Progress: Governor Hochul Celebrates Major Milestone for Micron's \$100 Billion Investment in Central New York,” news release, 2026, <https://www.governor.ny.gov/news/promise-progress-governor-hochul-celebrates-major-milestone-microns-100-billion-investment>.

⁷ Minnesota Pollution Control Agency, “Drinking Water Planning and Design Funds for PFAS Treatment,” 2025, <https://www.pca.state.mn.us/grants-and-loans/drinking-water-planning-and-design-funds-for-pfas-treatment>.

⁸ “New Jersey Water Bank ” New Jersey Department of Environmental Protection, <https://dep.nj.gov/wiip/njwb-process/>.

⁹ Mark A. Lucca, “PFAS Treatment, Infrastructure Investment, and the Power of Partnerships,” <https://vista.today/2026/01/pfas-treatment-edgely-water-facility/>.

¹⁰ “Carollo, Cdm Smith Team to Design Advanced Treatment Upgrades for Florida County,” *Water Finance and Management*, 2026, <https://waterfm.com/carollo-cdm-smith-to-design-advanced-treatment-for-florida-county/>.

¹¹ Lacey Latch, “Buckingham Will Allocate Nearly \$5m to Remove Pfas from Township Water,” *Bucks County Courier Times*, 2026, <https://www.phillyburbs.com/story/news/local/2026/02/04/buckingham-spending-5million-pfas-forever-chemicals-local-water-system-bucks-county/88492657007/>.

- 2026, Charlestown, IN¹²
- 2026, Chico, CA¹³
- 2026, Frisco, CO¹⁴
- 2025, Collinsville, IL¹⁵
- 2025, Oak Park Heights, MN¹⁶
- 2025, Raleigh, NC¹⁷
- 2025, Stanton, DE¹⁸
- 2024, Phillipston, MA¹⁹
- 2024, Wausau, WI²⁰

¹² “Indiana American Water Installs First Drinking Water PFAS Treatment System in Indiana,” *American Water*, 2026, <https://newsroom.amwater.com/2026-01-29-Indiana-American-Water-Installs-First-Drinking-Water-PFAS-Treatment-System-in-Indiana>.

¹³ Will Anderson, “Cal Water Begins Infrastructure Upgrade to Water System in Chico, Installing Treatment Equipment to Comply with PFAS Regulations,” *Action News Now*, 2026, https://www.actionnewsnow.com/news/cal-water-begins-infrastructure-upgrade-to-water-system-in-chico-installing-treatment-equipment-to-comply/article_611e80d8-fd6f-408e-bab7-39d03ba8a4ad.html.

¹⁴ Allison Moore, “Construction of PFAS ‘Forever Chemical’ Treatment Facility near Frisco Adventure Park to Begin Next Month,” *Summit Daily* 2026 <https://www.summitdaily.com/news/construction-of-pfas-forever-chemical-treatment-facility-near-frisco-adventure-park-to-begin-next-month/>.

¹⁵ Laura Barczewski, “Collinsville to Install \$10m Filtration System over Growing PFAS Contamination,” 2025 <https://www.ksdk.com/article/news/local/collinsville-filtration-system-pfas-forever-chemicals-drinking-water/63-38d838c7-aaa2-42ac-a46e-b28005486952>.

¹⁶ “September 30, 2025 PFAS Update: Water Treatment,” *City of Oak Park Heights* 2025, <https://www.cityofoakparkheights.com/index.asp?SEC=55E630E3-5B17-4E4F-B420-D0386E52BB46&DE=B498919A-CAD4-48EE-9363-7AC606553B53>.

¹⁷ “Aqua North Carolina Installs 7 PFAS Treatment Systems to Protect Drinking Water,” *Smart Water Magazine* 2025, <https://smartwatermagazine.com/news/aqua-america/aqua-north-carolina-installs-7-pfas-treatment-systems-protect-drinking-water>.

¹⁸ Veolia, “Veolia Opens One of the Largest Pfas Treatment Plants in the U.S., Delivering High-Quality Drinking Water to over 100,000 Delaware Residents ” 2025, <https://www.veolia.com/sites/g/files/dvc4206/files/document/2025/06/pr-pfas-veolia-stanton-ribbon-cutting-061825.pdf>.

¹⁹ Greg Vine, “Phillipston Receives \$90k to Treat PFAS in Water Supply,” *Athol Daily News* 2024, <https://atholdailynews.com/2024/08/13/phillipston-pfas-grant-56438855/>.

²⁰ “Wausau Prepares to Meet PFAS Standards with New Water Treatment System,” *Wausau Pilot & Review*, 2024, <https://wausaupilotandreview.com/2024/12/03/wausau-prepares-to-meet-pfas-standards-with-new-water-treatment-system/>.

Additional Extensions of Time Must Be Evaluated on a Case-by-Case Basis, as Provided for in SDWA

As illustrated in the examples above, many of the nation's water utilities have already begun to respond to public concerns about PFAS contamination, preparing to protect their customers from continuing exposures to harmful PFAS and to come into compliance with the MCLs by 2029. Nonetheless, some utilities, particularly smaller systems that may not have undertaken previous testing could face tight deadlines for meeting the 2024 standards.

SDWA provides ample opportunity for addressing those problems on a case-by-case basis rather than with an unprecedented, sweeping invitation for delay to all systems as EPA now proposes.

Section 1416 covers “Exemptions” and provides that states with primacy may act to “exempt” a public water system from timely compliance due to “compelling factors” that prevent the system from complying, either by utilizing an acceptable treatment technique or by taking action to develop an alternative water supply.²¹ As discussed below, the regulatory authority granting the exemption must also determine that “granting of the exemption will not result in an unreasonable risk to health.”²² In addition, the state agency must also consider whether compliance may be achieved or water quality improved by management or restructuring changes or both.²³ Any exemptions granted under this authority must also include an enforceable compliance schedule specific to the system, with notice and opportunity for a public hearing regarding that schedule.²⁴

Under the law, EPA itself would undertake these duties only in cases where states had not yet been granted primacy authority for the new regulations.²⁵ After more than two full years since promulgation of the rule, it does not appear that EPA has yet granted primacy authority for these regulations to any state. Rather, the Agency, by seeking and receiving delays in the ongoing

²¹ Safe Drinking Water Act (SDWA) Amendments of 1996, Pub. L. No. 104–182, 110 Stat. 1613 (1996) §1416 (b)(1)

²² Safe Drinking Water Act (SDWA) Amendments of 1996, Pub. L. No. 104–182 §1416 (a)(3)

²³ Safe Drinking Water Act (SDWA) Amendments of 1996, Pub. L. No. 104–182 §1416 (a)(4)

²⁴ Safe Drinking Water Act (SDWA) Amendments of 1996, Pub. L. No. 104–182 §1416 (b)(1)

²⁵ Safe Drinking Water Act (SDWA) Amendments of 1996, Pub. L. No. 104–182 §1416 (f)

litigation relevant to the rule,²⁶ and by advising states to delay seeking primacy,²⁷ has created for itself the obligation to carry out these case-by-case reviews. Such efforts may require substantial resources, particularly for federal regulators who are not already familiar with the issues encountered by local water systems, but EPA cannot now attempt to address this dilemma by substituting a cursory, national consideration of exemptions. A careful, system-by-system review is what the law and public health protection require.

Rather than undertake a new effort to invite requests for exemptions across the board and perform a likely cursory review of these applications, we recommend that the Agency spend the next months working closely with states to review and approve primacy applications from those that have moved to adopt the new standards and to provide assistance to other states as they work to do the same.

EPA’s Proposal Diminished the Value of System Consolidation or Use of New Water Sources

EPA’s 2026 proposal correctly notes that “management and restructuring” options must be evaluated before an exemption is granted to a system,²⁸ but the Agency also offers a narrow view of what such changes may entail and how they might reasonably address problems with PFAS exceedances.

Language in the proposal appears to exclude the real potential for many systems to thoughtfully identify alternative sources of water, such as drilling a new well into an uncontaminated formation or purchasing water from or consolidating with another system. EPA appears to look only at management and restructuring changes “supporting the ability of the system to install and

²⁶ American Water Works Association v. EPA, No. 24-1188 (D.C. Cir. 2024)

²⁷ Marietta Echeverria, “Memorandum: Primacy Requirements for the Revised Consumer Confidence Report Rule,” U.S. EPA 2026, https://www.epa.gov/system/files/documents/2026-01/ccr3-primacy-memo_jan-2026.pdf.

²⁸ U.S. EPA, “Extending the Compliance Deadline for the PFOA and PFOS Maximum Contaminant Levels Extending the Compliance Deadline for the PFOA and PFOS Maximum Contaminant Levels US Environmental Protection Agency,” Federal Register 91, no. 97 (May 20, 2026):29425, <https://www.govinfo.gov/content/pkg/FR-2026-05-20/pdf/2026-10086.pdf>.

use advanced treatment” technologies itself.²⁹ The Agency then claims that such alternatives will not be available to the vast majority of systems:

...the EPA expects that nearly all water systems exceeding the PFOA and PFOS MCLs will need to make capital improvements to achieve compliance with the standard and, due to compelling factors and other considerations detailed previously, many of these systems will not be able to make these improvements prior to April 26, 2029.³⁰

This interpretation is not consistent with the language of SDWA Section 1452(a)(4) and misses the legislative history of the Act regarding small system viability, including the restrictions on grant assistance to systems which fail to follow any state direction “...to ensure that the system has the technical, managerial, and financial capability” to comply with the Act’s requirements.”³¹

Congress and EPA advisors recognized decades ago that a sizable number of small systems lack the scale and rate base to achieve long-term financial viability and reliably provide clean drinking water.^{32,33,34} This is why the provisions of the Act speak specifically to alternatives and

²⁹ *Ibid.*

³⁰ *Ibid.*

³¹ Safe Drinking Water Act (SDWA) Amendments of 1996, Pub. L. No. 104–182 §1452 (A)(3)

³² U.S. EPA SAB, Environmental Economics Advisory Committee, “EPA Affordability Criteria for Small Drinking Water Systems: An EPA Science Advisory Board Report,” 2002, <https://nepis.epa.gov/Exe/ZyNET.exe/P100JOKY.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2000+Thru+2005&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C00thru05%5CTxt%5C00000033%5CP100JOKY.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL.>

³³ EPA SAB, letter to the Honorable Christine Todd Whitman, Administrator of the U.S. EPA, “Affordability Criteria for Small Drinking Water Systems: An EPA Science Advisory Board Report.” December 30, 2002, <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100JOKY.TXT>, which states that “...the Agency should consider options of system consolidation, and take these into account when analyzing the nature and duration of any relaxation of drinking water quality requirements.”

³⁴ National Research Council, *Safe Water From Every Tap, Improving Water Service to Small Communities*, (Washington, DC: The National Academies Press, 1997), <https://www.nationalacademies.org/read/5291/>.

why states have been directed to consider viability when offering both grants and exemptions. EPA's current proposal, however, assumes that every small system with MCL violations will eventually install and manage an advanced treatment system.

In our view, the law clearly requires a state with primacy authority, or in the alternative, EPA itself, to carefully consider the feasibility of all options to restructure or consolidate system operations where appropriate. EPA should consider this important provision in the law.

Robust Scientific Evidence Demonstrates Adverse Health Effects of PFOA and PFOS, Including Before Pregnancy, In Utero, and in Early Life

PFOA and PFOS are two of the most well-studied PFAS, with decades of biomonitoring and toxicological and epidemiological evidence linking exposure to adverse health effects across the lifespan. These chemicals, as well as other PFAS, are associated with numerous serious health concerns including increased risk of cancer, developmental effects such as reduced birth weight to fetuses during pregnancy and infants, cardiovascular impacts, metabolic impacts, male and female reproductive harm (e.g., infertility), and immunological effects, such as reduced response to vaccines.^{35,36} And, virtually all Americans, now estimated at 99% of the population, have measurable levels of PFOA or PFOS in their blood, while exposures from drinking water continue.³⁷

While exposure to PFOA and PFOS causes health effects in exposed adults (e.g., increased total cholesterol), particularly sensitive windows of exposure include time before conception (in females and males) and during and after pregnancy, where even short durations of exposure may

³⁵ U.S. EPA, "Human Health Toxicity Assessment for Perfluorooctane Sulfonic Acid (PFOS) and Related Salts," 2024 <https://www.epa.gov/system/files/documents/2024-05/final-human-health-toxicity-assessment-pfos.pdf>.

³⁶ U.S. EPA, "Human Health Toxicity Assessment for Perfluorooctanoic Acid (PFOA) and Related Salts," 2024, <https://www.epa.gov/system/files/documents/2024-05/final-human-health-toxicity-assessment-pfoa.pdf>.

³⁷ Julianne Cook Botelho et al., "Per- and Polyfluoroalkyl Substances (PFAS) Exposure in the U.S. Population: Nhanes 1999–March 2020," *Environmental Research* 270 (2025): 120916, <https://www.sciencedirect.com/science/article/pii/S0013935125001677>.

cause long-lasting health impacts to multiple generations.^{38,39,40, 41} PFOA and PFOS have been detected in cord blood samples, placental tissue, and breast milk, indicating clear exposure during sensitive windows of development.^{42,43} Given the long half-lives of PFOA and PFOS in the body and the estimated 100:1 ratio between serum level increases and drinking water concentrations in PFOA, even short-term exposure can lead to elevated serum levels for years after.⁴⁴ Additionally, drinking water is a major source of exposure to PFOA and PFOS for infants due to their greater intake of water relative to their body size, compared to adults. This can be primarily through maternal transfer from breastfeeding, with studies showing levels of PFOA

³⁸ Pheruza Tarapore and Bin Ouyang. "Perfluoroalkyl Chemicals and Male Reproductive Health: Do PFOA and PFOS Increase Risk for Male Infertility?" In *International journal of environmental research and public health*, 3794, 2021.

³⁹ Ling Liu et al., "Per- and Polyfluoroalkyl Substances Exposure from Preconception to Lactation: Implications for Female Fertility, Pregnancy Complications, and Birth Outcomes: A Narrative Review," *F&S Reviews* 7, no. 1 (2026): 100102, <https://www.sciencedirect.com/science/article/pii/S2666571926000034>.

⁴⁰ John T. Szilagyi, Vennela Avula, and Rebecca C. Fry, "Perfluoroalkyl Substances (PFAS) and Their Effects on the Placenta, Pregnancy, and Child Development: A Potential Mechanistic Role for Placental Peroxisome Proliferator–Activated Receptors (Ppars)," *Current environmental health reports* 7, no. 3 (2020): 222-30, <https://doi.org/10.1007/s40572-020-00279-0>.

⁴¹ Yasmyn E Winstanley et al., "Perfluoroalkyl and polyfluoroalkyl substances (PFAS) in trace levels via drinking water diminishes mouse embryo mitochondria function across three generations." *Environ Res.* 1, no. 296 (2026):124043. <https://doi.org/10.1016/j.envres.2026.124043>.

⁴² Mareike Appel et al., "The Transplacental Transfer Efficiency of Per- and Polyfluoroalkyl Substances (Pfas): A First Meta-Analysis," *Journal of Toxicology and Environmental Health, Part B* 25, no. 1 (2022): 23-42, <https://doi.org/10.1080/10937404.2021.2009946>.

⁴³ Neus González and Jose L. Domingo, "PFC/PFAS Concentrations in Human Milk and Infant Exposure through Lactation: A Comprehensive Review of the Scientific Literature," no. 1432-0738 (Electronic).

⁴⁴ Gloria B. Post, Perry D. Cohn, and Keith R. Cooper, "Perfluorooctanoic Acid (PFOA), an Emerging Drinking Water Contaminant: A Critical Review of Recent Literature," *Environmental Research* 116 (2012): 93-117, <https://www.sciencedirect.com/science/article/pii/S0013935112000904>.

and PFOS increasing in serum between infancy and six months of age, as well as from infant formula reconstituted with contaminated drinking water.^{45,46, 47}

Exposure during pregnancy has been associated with increased risk of pregnancy-related hypertension, and preeclampsia, including in the highly exposed residents of the Mid-Ohio Valley, who drank water contaminated with PFOA from industrial discharges.⁴⁸ Studies in mice show that altered mammary gland development can occur at low doses of PFOA exposure, and epidemiological evidence links PFOA and PFOS in serum with reduced breastfeeding duration, which is a concern due to the health benefits, such as reduced risk of breast cancer, for the mother later in life.^{49,50, 51}

PFOA and PFOS have also been linked to adverse birth outcomes, including preterm birth and low birth weight. In EPA's final toxicity assessments for PFOA and PFOS, reduced birth weight was identified as a co-critical effect. This outcome has been observed in numerous cohorts and case control studies, including in the Environmental Influences on Child Health Outcomes (ECHO) cohort, the largest pregnancy cohort in the United States (ECHO study), assessing

⁴⁵ Helen M. Goeden, Christopher W. Greene, and James A. Jacobus, "A transgenerational toxicokinetic model and its use in derivation of Minnesota PFOA water guidance." *J Expo Sci Environ Epidemiol.*, 29, no. 2 (2019):183-195. doi: 10.1038/s41370-018-0110-5. Epub 2019 Jan 10. Erratum in: *J Expo Sci Environ Epidemiol.* 2019 Oct;29(6):863. doi: 10.1038/s41370-019-0148-z. Erratum in: *J Expo Sci Environ Epidemiol.* 2020 Mar;30(2):395. doi: 10.1038/s41370-019-0191-9. PMID: 30631142; PMCID: PMC6760606.

⁴⁶ Judy S. LaKind et al., "Per- and polyfluoroalkyl substances (PFAS) in breast milk and infant formula: A global issue." *Environ Res*, 1 2023 Feb 15;219:115042. doi: 10.1016/j.envres.2022.115042.

⁴⁷ Gloria B. Post, "Invited Perspective: Current Breast Milk PFAS Levels in the United States and Canada Indicate Need for Additional Monitoring and Actions to Reduce Maternal Exposures," *Environmental Health Perspectives* 130, no. 2 (2022): 021301, <https://doi.org/10.1289/EHP10730>.

⁴⁸ D. A. Savitz et al., "Relationship of Perfluorooctanoic Acid Exposure to Pregnancy Outcome Based on Birth Records in the Mid-Ohio Valley," no. 1552-9924 (Electronic).

⁴⁹ Amalie Timmermann et al. "Per- and Polyfluoroalkyl Substances and Breastfeeding as a Vulnerable Function: A Systematic Review of Epidemiological Studies." In *Toxics*, 11, no. 4 (2023):325, <https://doi.org/10.3390/toxics11040325>.

⁵⁰ Katherine E. Pelch et al., "Lactation Interrupted: PFAS Impact on Capacity to Breastfeed Ignored." *Curr Envir. Health Rpt*, 13, no. 27 (2026), <https://doi.org/10.1007/s40572-026-00546-6> 10.1007/S40572-026-00546.

⁵¹ Cesar G. Victora et al., "Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect." *The Lancet* 387, no. 10017 (2016):475-490. [https://doi.org/10.1016/S0140-6736\(15\)01024-7](https://doi.org/10.1016/S0140-6736(15)01024-7).

exposure and outcomes in more than 3,000 mother-child pairs.⁵² Research demonstrates that being born preterm or at a low birth weight increases an individual's risk of adverse health outcomes, particularly cardiovascular and metabolic outcomes, later in life.^{53, 54} Importantly, the mean PFOA and PFOS serum concentrations measured in women in the ECHO study were typically below levels recently observed in the general population, suggesting potential increased risk even from low levels of exposure. Within the range of levels observed in the general population, there is a gradient of increased risk with increased exposure. This observation is consistent with PFAS, including PFOA and PFOS, acting as endocrine-disrupting chemicals that can elicit adverse impacts at low doses.^{55,56} Other studies have assessed how PFAS exposure from contaminated drinking water specifically can impact pregnancy. In New Hampshire, women living downstream of a PFAS contamination site, with elevated levels of PFAS in ground water, had higher rates of infant mortality, early births, and births with reduced weights compared to women drinking water not impacted by the PFAS contamination.⁵⁷ In Minnesota, researchers found evidence of a strong relationship between the installation of water treatment technology to reduce levels of PFOA and PFOS, and improved birth outcomes where the odds of preterm birth and low birth weight were elevated in the time period pre-installation of water treatment technology compared to the time period after installation.⁵⁸

Gestational exposures to PFOA and PFOS are associated with reduced vaccine response in children, and this endpoint was identified by EPA as a co-critical effect in toxicity assessments.

⁵² Amy M. Padula et al., "Birth Outcomes in Relation to Prenatal Exposure to Per- and Polyfluoroalkyl Substances and Stress in the Environmental Influences on Child Health Outcomes (ECHO) Program," *Environmental Health Perspectives* 131, no. 3 (2023): 37006, <https://doi.org/10.1289/ehp10723>.

⁵³ Faith Gette et al., "Long-Term Health Outcomes of Preterm Birth: A Narrative Review," *Frontiers in Pediatrics*, 13, no. 1565897 (2025), <https://doi.org/10.3389/fped.2025.1565897>.

⁵⁴ Tonse N.K. Raju, MD et al., "Long-Term Healthcare Outcomes of Preterm Birth: An Executive Summary of a Conference Sponsored by the National Institutes of Health," *The Journal of Pediatrics* 181 (2017): 309-18.e1, <https://doi.org/10.1016/j.jpeds.2016.10.015>

⁵⁵ R. K. Ripon et al., "PFAS Exposure and Endocrine Disruption among Women," no. 2574-3805 (Electronic).

⁵⁶ Brittany P. Rickard, Imran Rizvi, and Suzanne E. Fenton, "Per- and Poly-Fluoroalkyl Substances (PFAS) and Female Reproductive Outcomes: Pfas Elimination, Endocrine-Mediated Effects, and Disease," *Toxicology* 465 (2022): 153031, <https://www.sciencedirect.com/science/article/pii/S0300483X2100353X>.

⁵⁷ Robert Baluja et al., "PFAS-Contaminated Drinking Water Harms Infants," *Proceedings of the National Academy of Sciences* 122, no. 50 (2025): e2509801122, <https://doi.org/10.1073/pnas.2509801122>.

⁵⁸ Gina Waterfield et al. "Reducing Exposure to High Levels of Perfluorinated Compounds in Drinking Water Improves Reproductive Outcomes: Evidence from an Intervention in Minnesota." In *Environmental health a global access science source*, 42, 2020.

In its derivation of interim health advisories for PFOA and PFOS in 2022, EPA relied on this developmental immune health outcome, resulting in health protective drinking water concentration levels of 0.004 and 0.02 ppt for PFOA⁵⁹ and PFOS⁶⁰ respectively.

The latest data from the U.S. Centers for Disease Control and Prevention (CDC) indicate there were 3,628,934 births in 2024.⁶¹ A delay of an additional two years to comply with PFOA and PFOS MCLs increases health risks to pregnancies during that time in addition to millions of other individuals served by the tens of thousands of public water systems in the United States.

EPA’s Implied Criteria for identifying an ‘Unreasonable Risk to Health’ Is Not Supported By the Scientific Evidence

The proposed rule identifies 12 ppt as a cutoff for “unreasonable risk,” without clear explanation. Pew disagrees that only levels above 12 ppt would constitute an ‘unreasonable risk to health’ during the delay of the enforcement of the PFOA and PFOS MCLs. The current MCL of 4 ppt was established based on both the practical quantitation level and the availability of effective treatment technologies, while the MCLG for PFOA and PFOS was appropriately set as 0 ppt, indicating that no safe level of exposure to these chemicals is known to exist.⁶² As a result, Pew believes that any detection of PFOA or PFOS above the MCL of 4 ppt represents an unreasonable risk to health, based on cancer and non-cancer health outcomes associated with PFOA and PFOS exposures that the agency itself has identified..

This position is also supported by health protective drinking water limits and advisory levels in several states. California public health goals (PHG) and health protective concentrations (HPC), which are solely based on health considerations, rather than technical feasibility, are far below 12

⁵⁹ U.S. EPA. “Interim Drinking Water Health Advisory: Perfluorooctanoic Acid (PFOA) CASRN 335-67-1,” 2022, <https://www.epa.gov/system/files/documents/2022-06/interim-pfoa-2022.pdf>.

⁶⁰ U.S. EPA. “Interim Drinking Water Health Advisory: Perfluorooctane Sulfonic Acid (PFOS) CASRN 1763-23-1,” 2022, <https://www.epa.gov/system/files/documents/2022-06/interim-pfos-2022.pdf>.

⁶¹ Michelle J.K. Osterman et al. “Births: Final Data for 2024.” *National Vital Statistics Reports* 75. No. 2 (2026), U.S. Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, <https://www.cdc.gov/nchs/data/nvsr/nvsr75/nvsr75-02.pdf>.

⁶² U.S. EPA. “Per- and Polyfluoroalkyl Substances National Primary Drinking Water Regulation,” Federal Register 89, no. 82 (April 26, 2024):32532, <https://www.govinfo.gov/content/pkg/FR-2024-04-26/pdf/2024-07773.pdf>.

ppt for cancer and non-cancer-based values. The state has set PHGs of 0.007 and 1 ppt for PFOA and PFOS, respectively for carcinogenic effects, and HPCs of 3 and 2 ppt for PFOA and PFOS respectively for non-cancer outcomes.⁶³ These numbers based on non-cancer outcomes are derived from PFAS exposure in humans and adverse effects to liver function and cholesterol levels and take into consideration age-specific drinking water intake rates.^{64,65} A number of other states have also set enforceable MCLs below 12 ppt, for example, 8 ppt for PFOA in Michigan⁶⁶, 10 ppt for PFOA and PFOS in New York⁶⁷, or established health-based guidance values for example in Minnesota at 0.24 and 2.3 ppt for PFOA⁶⁸ and PFOS.⁶⁹

Additionally, it has been estimated that based on studies suggesting a 100:1 ratio between serum level increases in PFOA and drinking water concentrations, chronic exposure to 10 ppt PFOA would increase serum levels by 1 ng/mL.⁷⁰

EPA has determined there is no safe level of exposure to PFOA and PFOS. Allowing water systems to delay enforcement of the 4 ppt MCLs could unnecessarily result in millions of Americans who are unknowingly exposed to PFOA and PFOS at unsafe levels. In EPA's 2024 analysis of non-targeted finished water monitoring for 20 states available as of May 2023, there were 1,260 systems with results above the PFOS MCL of 4 ppt and 1,577 systems with results

⁶³ Pesticide and Environmental Toxicology Branch Office of Environmental Health Hazard Assessment and California Environmental Protection Agency, "Perfluorooctanoic Acid and Perfluorooctane Sulfonic Acid in Drinking Water," 2024, <https://oehha.ca.gov/sites/default/files/media/2024-10/pfoapfosphgfinaldraft040524.pdf>.

⁶⁴ Valentina Gallo et al., "Serum Perfluorooctanoate (PFOA) and Perfluorooctane Sulfonate (PFOS) Concentrations and Liver Function Biomarkers in a Population with Elevated PFOA Exposure," *Environmental Health Perspectives* 120, no. 5 (2012): 655-60, <http://europemc.org/abstract/MED/22289616>

⁶⁵ Kyle Steenland et al., "Association of Perfluorooctanoic Acid and Perfluorooctane Sulfonate with Serum Lipids among Adults Living near a Chemical Plant," *American Journal of Epidemiology* 170, no. 10 (2009): 1268-78, <https://doi.org/10.1093/aje/kwp279>.

⁶⁶ "Michigan PFAS Action Response Team" <https://www.michigan.gov/pfasresponse/drinking-water/mcl>.

⁶⁷ "Public Water Systems and Drinking Water Standards for PFAS and Other Emerging Contaminants," New York State Department of Health, https://health.ny.gov/environmental/water/drinking/emerging_pfas_publicwater.htm.

⁶⁸ Minnesota Department of Health, "Toxicological Summary For: Perfluorooctanoate," 2025, <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/gw/pfoa.pdf>.

⁶⁹ Minnesota Department of Health, "Toxicological Summary For: Perfluorooctane Sulfonate," 2025, <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/gw/pfos.pdf>.

⁷⁰ Gloria B. Post, Perry D. Cohn, and Keith R. Cooper, "Perfluorooctanoic Acid (PFOA), an Emerging Drinking Water Contaminant: A Critical Review of Recent Literature," *Environmental Research* 116 (2012): 93-117, <https://www.sciencedirect.com/science/article/pii/S0013935112000904>.

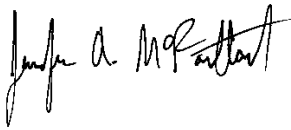
above the PFOA MCL of 4 ppt, serving populations of 12.5 (PFOS) and 14.4 million people (PFOA) respectively.⁷¹ Further, EPA identified 491 systems with detection levels above 10 ppt for PFOS and 612 systems with detection levels above 10 ppt for PFOA, serving populations of approximately 5.3 (PFOS) and 6.0 million people (PFOA).⁷² These figures underscore the scale of continued exposure to PFOA and PFOS and consequent adverse health impacts if EPA moves its proposal forward.

Conclusion

After protracted and careful deliberations over the course of more than 15 years, EPA correctly finalized a drinking water rule in 2024 that would have substantially protected public health from PFAS contamination. EPA's 2024 rule was not only based on the best available science, but on the foundation of nearly two decades worth of data collection and public engagement pointing to its necessity. Any further delay in implementing this important rule is a missed opportunity to address a serious and continuing public health problem. To best protect this and future generations of Americans, we strongly recommend that EPA withdraw its 2026 proposal and take prompt action to fully meet the compliance deadlines for the PFAS Drinking Water Rule.

We appreciate the opportunity to comment. Please contact Velma Smith, Senior Officer, Government Relations (vsmith@pewtrusts.org) for additional information or questions.

Sincerely,



Jennifer McPartland
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The Pew Charitable Trusts

⁷¹ U.S. EPA. "Per- and Polyfluoroalkyl Substances National Primary Drinking Water Regulation," Federal Register 89, no. 82 (April 26, 2024):32532, <https://www.govinfo.gov/content/pkg/FR-2024-04-26/pdf/2024-07773.pdf>.

⁷² *Ibid.*