



May 10, 2021

Dr. Jennifer McLain
Office of Ground Water and Drinking Water
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20009

Re: Revisions to the Unregulated Contaminant Monitoring Rule (UCMR5) for Public Water Systems (Docket Number: [EPA-HQ-OW-2020-0530](#))

Dear Dr McLain,

The Association of State Drinking Water Administrators (ASDWA) appreciates the opportunity to offer comments on the “Revisions to the Unregulated Contaminant Monitoring Rule (UCMR5) for Public Water Systems” as published in the March 11, 2021 *Federal Register* (86 FR 13846). ASDWA is the national, nonpartisan, non-profit association representing the collective interests of the drinking water program administrators in the 50 states, five territories, the District of Columbia, and the Navajo Nation. ASDWA’s members implement the Safe Drinking Water Act (SDWA) every day to ensure the protection of public health.

The primacy agencies are co-regulators with the Environmental Protection Agency (EPA) in the development and implementation of drinking water regulations. As such, ASDWA’s members have a unique relationship with EPA when compared to other drinking water stakeholders such as the regulated community, i.e., the water systems. ASDWA’s members typically provide a range of implementation assistance to the Agency for UCMRs and intend to do so for UCMR5.

ASDWA commends the Environmental Protection Agency (EPA) for developing this proposed rule in accordance with SDWA and addressing the changes to the rule required by Congress. As required by the 2020 National Defense Authorization Act (PL 116-92), EPA must include all per- and polyfluoroalkyl substances (PFAS) for which EPA has validated a method to measure the level in drinking water. However, the 29 PFAS included in the proposed UCMR5 will not count towards the limit of 30 contaminants to be monitored under UCMRs. As required by the 2018 America’s Water Infrastructure Act (PL 115-270), all PWS serving 3,300 or more people are required to conduct monitoring under UCMR5 (subject to the availability of appropriations and sufficient laboratory capacity). ASDWA supports these revisions to UCMR5, consistent with the law and recognizes the work ahead for EPA with medium and small systems’ UCMR5 monitoring.

ASDWA supports EPA's continued investigation of contaminants through UCMR5, as UCMRs are a critical component of the regulatory development process in Section 1412(b) of the Safe Drinking Water Act (SDWA) in developing robust national occurrence data. However, robust occurrence data is one component of the regulatory development and the health effects research is not keeping up with UCMR monitoring. This health effects data is critical, and it provides the important contextual information on what the occurrence data means for public health protection. This health effects research is critical for the EPA Administrator to make the judgement call on whether a national regulation provides a meaningful opportunity for risk reduction as required by the SDWA.

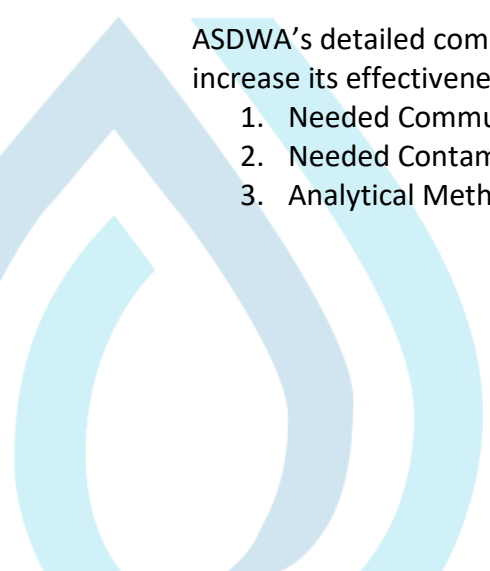
With the proposed UCMR5, there is a strong need for health effects research and risk communication resources associated with the proposed contaminants. In the development of resources to address these issues with the proposed UCMR5, input from both states and water systems is necessary. As the co-regulator with EPA, EPA should reach out to ASDWA to discuss how the Agency will address our comments without delaying the UCMR5 sampling that is scheduled to begin in January 2023.

ASDWA recommends that EPA start the development of risk communication materials and recommended actions for water systems and primacy agencies for the 29 PFAS and lithium as soon as possible. These materials should be developed through a stakeholder engagement process, and the materials must be ready prior to the first release of UCMR5 monitoring data in mid- to late-2023, which is only two years from now. The water systems and the primacy agencies cannot be left on their own to figure out risk communications and recommended actions. The drinking water community needs a consistent national approach for UCMR5, due the unprecedented publicity and ongoing actions in state legislatures to address PFAS.

ASDWA recommends that EPA restore the connection between the Contaminant Candidate List (CCL) and UCMRs. Future UCMRs should be designed to generate robust national occurrence data to assist in the decision-making for regulatory determinations from the CCL. The inclusion of lithium, a contaminant not listed on the Fourth Contaminant Candidate List (CCL4) as opposed to other CCL4 contaminants with health effects data and analytical methods, appears to be a missed opportunity to move additional CCL4 contaminants through future regulatory determinations.

ASDWA's detailed comments that follow recommend several changes to the proposed rule to increase its effectiveness. ASDWA's comments are organized into three categories:

1. Needed Communication Resources;
2. Needed Contaminant Research; and
3. Analytical Methods/Lab Capacity/Quality Assurance Concerns and Recommendations



The detailed comments that follow are intended to broadly address the proposed rulemaking, but these comments do not necessarily reflect the concerns of individual states. EPA should consider comments from individual states as part of its process for finalizing UCMR5.

ASDWA appreciates the opportunity to provide this input on the proposed UCMR5 and hopes that the Agency takes this input into consideration when finalizing this regulation. Developing robust national occurrence data is a critical step in the regulatory development process, noting that health effects research is another critical step in this process that needs additional funding.

If you have any questions regarding these comments, please contact me (aroberson@asdwa.org) or Kevin Letterly (kletterly@asdwa.org).

Sincerely,



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Executive Director

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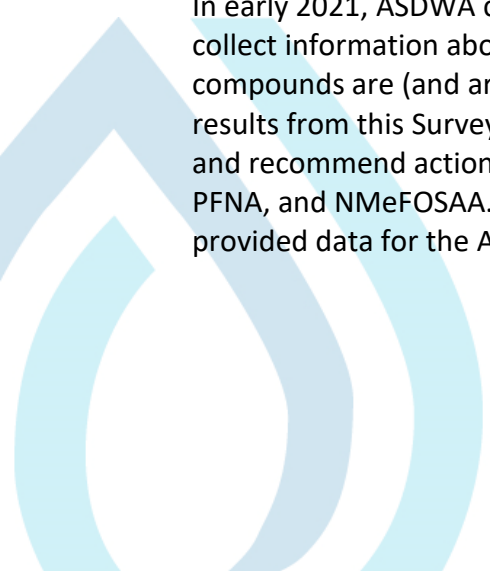
1. Needed Communication Resources

This UCMR is unlike any of the past UCMRs and calls for a higher level of risk communication than previous UCMRs – the bar needs to be set higher. The inclusion of 29 PFAS, which is a widely known contaminant family with multiple sources and a contaminant for which there are several varying state-level, health-based numbers and MCLs in addition to federal health advisory levels and toxicological values. The inclusion of 29 PFAS in UCMR5 means that EPA, states, and water systems will need to have the appropriate risk communication materials for communication with the public. Water systems will also need an action plan for what to do when they detect a PFAS above an applicable health level, below an applicable health level, or what to do if there is no existing health effects information. EPA and states will need to be clear about expectations for water systems' actions following PFAS detections under UCMR5.

While ASDWA and its members support EPA including PFAS under UCMR5 and support following the requirements of Section 7311 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA), significant risk communication resources from EPA will be necessary for states to share with water systems. The lack of peer-reviewed toxicological studies for many of the PFAS in UCMR5 presents a risk communication challenge, particularly once sampling begins, and detections are found.

The [Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water](#) developed by EPA in 2015 for cyanotoxins are the best example of a complete package of risk communications materials and recommended actions. These recommendations are complete, with a robust step-by-step approach to cyanotoxin management that sets clear expectations for all stakeholders. Additional risk communication materials have been developed by other organizations such as the American Water Works Association, the Water Research Foundation, and the Association of State and Territorial Health Officials (ASTHO), and these materials should be incorporated into what the Agency develops. EPA must prioritize development of equivalent materials for the 29 PFAS and lithium, develop the materials through a stakeholder engagement process, and have the materials ready prior to the first release of UCMR5 monitoring data in 2023, which is only two years from now. The water systems and the primacy agencies cannot be left on their own to figure out risk communications and recommended actions. The drinking water community needs a consistent national approach for UCMR5, due the unprecedented publicity and ongoing actions in state legislatures to address PFAS.

In early 2021, ASDWA conducted a PFAS Sampling and Detection Survey with its members to collect information about state PFAS sampling efforts and to better understand which PFAS compounds are (and are not) being found during state-initiated sampling efforts. Based on results from this Survey, ASDWA recommends that EPA prioritize risk communication materials and recommend actions for the seven following compounds: PFBS, PFHpA, PFHxS, PFHxA, PFDA, PFNA, and NMeFOSAA. These compounds were most frequently detected by the 14 states that provided data for the ASDWA PFAS survey.



The following general trends were observed by the 14 responding states to this Survey:

- For Method 537.1
 - Fourteen of the responding states used this method, though they did not all sample for the full number of compounds that can be detected using the method.
 - There were at least 2 of the 14 states surveyed that had detections of each PFAS.
 - PFOA and PFOS were detected by all 14 states surveyed.
 - Four other compounds (PFBS, PFHpA, PFHxS, and PFHxA) were detected by all but one of the 13 states that sampled for PFHxS and PFHxA and all but one of the 14 states that sampled for PFBS and PFHpA.
 - PFDA, PFNA, and NMeFOSAA were also found by more than half of the states that sampled for them. This included:
 - PFDA: Detections for 7 out of 11 states
 - PFNA: Detections for 10 out of 14 states
 - NMeFOSAA: Detections for 6 out of 11 states
- For Method 533
 - Of the six states that used Method 533, PFBA was detected by 3 states and PFPeA was detected by 2 states.
 - The other compounds (NFDHA, 8:2FTS, PFEESA, PFHpS, 4:2FTS, PFMPA, PFMBA, 6:2FTS, and PFPeS) were not detected.
- Many states observed the co-occurrence of contaminants in sample results. For example, Pennsylvania's [Statewide Sampling Plan Second Round Results](#), at least ten of 40 sample sites with detections showed both PFOS and PFOA co-occurring with at least three of the following compounds - PFBS, PFHpA, PFHxS, PFHxA, and PFNA.
- Three states have used PFAS analytical methods other than 537.1 and 533 and detected as least one of four other PFAS (FOSA, PFOSA, PFTeDA, and PFUDA) for at least one water system source in their state.

It should be noted that these survey results cannot be extrapolated as nationally or statistically representative sample results for the state or the country because of the varying differences in where and how they were sampled. The survey summary can be found [here](#).

ASDWA believes the experience of these 14 states can help inform EPA on where the Agency should focus its efforts in developing risk communication and other tools for water systems to use before, during, and after UCMR sampling. This data has clear trends that show some PFAS are more commonly found in drinking water than others. EPA should use this information to begin the development of helpful risk communication tools for water systems to use when communicating with their customers about UCMR sampling.

EPA should consider a pre-sample communication strategy through press releases, social media, or other appropriate methods to inform the public of the purpose of UCMR, how the result will be used, what contaminants will be sampled, what a detection means, and how long

it takes to get sample result information out to the public. A proactive approach will help mitigate potential misunderstandings after UCMR5 sampling begins and once results are reported. EPA should develop template press releases for states and water systems for pre-UCMR sampling media strategies. EPA, primacy agencies, and water systems should develop post-sampling communication strategies to inform the public what contaminants were found and next steps. More and more, UCMR data is being used by parties other than the regulatory and regulated communities. EPA needs to address this by providing context to UCMR sampling and assisting states and water systems to have unified messaging where applicable.

Additionally, clarity is needed regarding actions to be taken based on detections for the proposed contaminants. Specific to the proposed PFAS, the development of a consistent and pre-established response decision tree is important. PFAS found in drinking water is a sensitive subject matter, and water systems will rightfully be met with questions and concerns from their consumers. Communications around analytical results should be clear and precise, providing recommendations and describing any actions required based on levels of risk. In those cases where levels represent an elevated risk, follow-up actions will likely require the participation of local public health, local government, state agencies, and EPA. Development of risk communication resources should involve frequent and regular input from both states and water systems.

ASDWA recommends that EPA develop and share resources on one-time sampling, follow-up sampling, resampling, and bottled water distribution (if necessary) for both the proposed PFAS and lithium sampling standards. At a minimum, detailed sampling guidance must be developed and made readily available for all samplers. Consideration should also be given to the contracting and mobilization of trained teams to collect samples for PFAS analysis. For the proposed contaminants, central and consistent communication from EPA will be important. This should include when sampling must occur and why confirmation sampling may be necessary, how sampling will be done and precisely where samples must be collected, and how those samples must be handled to ensure proper analysis. For PFAS especially, any room left for interpretation and non-exact methodology can lead to questions around the analytical results.

2. Needed Contaminant Research

ASDWA and its members support sampling for the proposed PFAS and lithium, however we urge EPA to restore the connection between the UCMR and CCL. ASDWA has consistently supported the regulatory process from the 1996 SDWA Amendments (CCL, UCMR, Regulatory Determination, 6 Year Review). This process is science-based, and makes regulatory determinations only after considering health effects, occurrence and determining that a regulation can improve public health protection. This process, when supported with adequate data, is preferable to regulating based on arbitrary target numbers or focusing on contaminants with high media profiles but where regulation is not supported by reliable data. The UCMR was developed in coordination with the CCL to provide EPA and others with scientifically valid data on the occurrence of contaminants in drinking water and develop national occurrence data to

inform EPA regulatory and other risk management decisions for drinking water contaminant candidates. This is a crucial element of the SDWA regulatory process.

The proposed UCMR5, however, only utilizes two of the contaminants identified in CCL 4, and this calls into question the regulatory relationship between CCL4 and UCMR5. The SDWA regulatory development involves selecting contaminants from the CCL for the UCMR to develop robust national occurrence data for a regulatory determination, followed by the development of a rule (or not), and a six-year review of the rule. ASDWA recognizes the EPA prerogative to include other, non-CCL priority contaminants in the UCMR, but by only including two contaminants from CCL 4 in the proposed UCMR, this suggests that the SDWA regulatory development process is not working as intended.

The inclusion of lithium in the proposed UCMR is further evidence that there is an issue with the regulatory development process for identifying unregulated contaminants. Lithium's inclusion in this UCMR poses questions such as: Why wasn't lithium included on CCL 4? Is the scientific development process moving too fast for the regulatory process to keep up? Does lithium have much more new health effects data, as opposed to other CCL4 contaminants? Should the drinking water community be evaluating the effectiveness of the current regulatory development process and developing improved methods for assessing contaminants for further SDWA regulatory actions?

Additionally, ASDWA does not agree with EPA's reasoning for excluding *Legionella pneumophila* and haloacetonitriles in the proposed UCMR5. EPA states in the *Federal Register* notice (86 FR 13846) it has "concerns about the utility of a UCMR5 data set on *Legionella pneumophila* based on the timeframe for the Agency deliberations about the [Microbial and Disinfection Byproduct (MDBP)] revisions. The UCMR5 data collection would not be complete in time to inform regulatory revision and would not reflect conditions in water systems after any regulatory revisions become effective." EPA uses the same reasoning for not including haloacetonitriles in UCMR5. Postponing, perhaps indefinitely, the monitoring of these contaminants due to mismatched regulatory timelines is short sighted. Prioritization of contaminants for UCMR should be based on risk. Information on occurrence of these contaminants is important and necessary regardless of regulatory timelines, especially because EPA cannot know at this time if these contaminants will even be addressed in the MDBP rule revisions. Because there is no UCMR data to provide occurrence information, it is difficult to see how EPA would be able to adequately address the contaminants if they are addressed in the MDBP rule revisions at all. EPA should set itself up for having this data to inform future regulatory revisions, beyond those the agency is already working on. ASDWA does, however, recognize the additional complexity, burden, and expense of monitoring for these contaminants.

While it is primarily considered a premise plumbing problem, studies have also linked *Legionella pneumophila* to existing in storage tanks, and the water sector should be looking holistically at addressing this contaminant. ASDWA recommends that EPA develop a holistic research strategy

in coordination with the Centers for Disease Control. This strategy should include directions detailing where to test for *Legionella pneumophila* and remediation actions to take once it is found. While UCMR5 is not likely to be the correct avenue to currently address *Legionella pneumophila*, comprehensive studies on this contaminant are needed, both in distribution system and within building plumbing. *Legionella pneumophila* is a significant public health problem that warrants a holistic research strategy so that progress can be made to address the problem. The public health problem goes way beyond the water sector, with significant responsibilities residing with the building owners and managers.

This is the first UCMR that will include contaminants with existing state-level maximum contaminant levels, which poses new challenges associated with duplicative sample collection. Many water systems already have PFAS treatment in place to meet state standards, and sampling results from these systems will likely result in non-detects, and therefore would not be providing EPA with useful occurrence data. To address this issue and reduce duplicative sample collection, EPA should exempt water systems that already have PFAS treatment in place.

3. Analytical Methods/Lab Capacity/Quality Assurance Concerns and Recommendations

Laboratory sample review and processing is a key component to the UCMR. As part of the UCMR, labs must successfully complete the EPA's lab approval program, demonstrating their ability to meet UCMR5 methods and guidelines. However, following the lab approval, states have expressed concern about the data reporting process. EPA needs to inform states on how data submitted by laboratories is being adequately reviewed and provide clarity on laboratory expectations for data accuracy and quality beyond the initial laboratory approval process.

ASDWA requests transparency from EPA on the quality assurance and quality control of the UCMR data collection process. Specifically, what data can be used and how it will be used. For example, will qualified lab data that may not meet the quality control process be accepted?

Additionally, ASDWA recommends that EPA use this opportunity to obtain additional information on total organic fluorine (TOF). The advantage of using TOF is to do an initial screening of all fluorinated compounds that may be present in the water and ensure that potentially significant contaminants are not being missed. The UCMR presents an opportunity to collect a diverse sample set that could aid in the method development and validation for TOF.

ASDWA recommends that EPA continue to develop additional analytical methods for PFAS beyond the 29 proposed in this UCMR, considering the full universe of compounds is in the thousands. Additional analytical methods are urgently needed to address PFAS contamination. For example, at least one state has health recommendations for PFODA, NtEtFOSA, and NMeFOSE, but is unable to sample because there are no associated analytical methods. Based

on our survey mentioned previously, three states have used PFAS analytical methods other than 537.1 and 533 and have detected as least one of four other PFAS (FOSA, PFOSA, PFTeDA, and PFUDA) for at least one water system source in their state.

States that are conducting PFAS sampling are concerned about the cost and burden associated with having to take and analyze samples twice, once for UCMR5 and once for state requirements and associated response actions because UCMR5 data will not capture the necessary sample results for states that have lower PFAS minimum reporting levels (MRLs). ASDWA recommends that in the final UCMR5, EPA provide flexibility for the states with lower detections to use labs meeting their state requirements if they are intending for the sample results to be used for compliance purposes in their state.

For example, Massachusetts, Illinois, Vermont, and New Hampshire have MRLs of 2 ppt for their PFAS MCL sampling requirements and have had their labs reliably report sample results at these MRLs for the following PFAS.

- Six PFAS in Massachusetts (PFOA, PFOS, PFHpA, PFHxS, PFNA, PFDA)
- Six PFAS in Illinois (PFOA, PFOS, PFBS, PFHxS, PFNA, PFHxA, HFPO-DA)
- Five PFAS in Vermont (PFOA, PFOS, PFHpA, PFHxS, PFNA)
- Four PFAS in New Hampshire (PFOS, PFOA, PFHxs, PFNA)

For a comparison, below is the listing EPA's UCMR5 MRLs for the above compounds for which these states will have to conduct duplicative sampling to use the lower MRLs.

- PFOA - 4 ppt
- PFOS - 4 ppt
- PFHpA - 3 ppt
- PFHxS - 3 ppt
- PFNA - 4 ppt
- PFHxA – 3 ppt
- PFDA - 3 ppt
- HFPO-DA – 5 ppt

It should be noted that this is just an example of four states, out of at least 25 states, that are conducting some type of PFAS sampling. Many of these states will need their water systems to either re-sample or analyze the samples two times for these and other compounds for water systems to meet their state PFAS sampling and MCL or guidance level requirements.

