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Brian D'Amico  
Associate Director (Acting)  
Engineering and Analysis Division  
Office of Science and Technology, Office of Water  
U.S. Environmental Protection Agency  
1201 Constitution Avenue NW  
Washington, DC 20004  
Submitted via email

**RE: Draft Narrative for POTW Influent Study on PFAS**

Dear Brian:

Thank you for the opportunity to review and comment on EPA's Draft Narrative for the proposed POTW Influent Study. NACWA represents the interests of 350 publicly owned wastewater and stormwater agencies of all sizes across the country. Each day, these public clean water agencies provide the essential service of protecting public health and the environment by managing and treating billions of gallons of our nation's wastewater and stormwater, as well as the millions of tons of biosolids generated as a byproduct of the wastewater treatment process.

NACWA appreciates and supports EPA's efforts to help identify and control industrial sources of per- and polyfluoroalkyl substances (PFAS). NACWA members share the concerns of EPA and their local communities regarding the presence of these chemicals in the environment and believe that PFAS must be controlled at their sources. Public clean water agencies have never, and do not, produce, manufacture, or intentionally use PFAS chemicals. They likewise do not profit from PFAS. Rather, public clean water agencies and stormwater systems encounter PFAS through two key means: industrial and commercial wastewater streams sent to the sewer system, and domestic household wastewater, as PFAS are used in and washed off from everyday consumer goods.

Public clean water agencies have no control over the amount of PFAS they receive from domestic sources, but EPA-developed pretreatment standards may be a useful tool in controlling industrial discharges of PFAS to POTWs. Many of NACWA's utility members have investigated which of their industrial users (IUs) may be discharging PFAS, conducting sampling programs either as

part of state or EPA Regional requirements or on their own initiative. Now that an analytical method has been identified and is working its way through the multi-lab validation process, more clean water utilities are planning for PFAS sampling in the near future, which will add to our collective knowledge of industrial PFAS sources. In addition, utilities are investigating PFAS discharges from domestic sources, and finding that domestic sources alone can often match or exceed industrial source contributions.

EPA's planned POTW Influent Study, if executed with diligence, could be a useful addition to the growing body of knowledge about PFAS sources beyond the industrial categories already identified in EPA's PFAS Strategic Roadmap. The study could ultimately help POTWs implement additional PFAS controls on industries. A description of the POTW Influent Study provided by EPA states that the purpose of the study is to "help to create a national dataset on industrial discharges of PFAS to POTWs; identify sources of PFAS wastewater discharged to POTWs; and assess the need for control measures upstream at the source." As explained in EPA's draft narrative, the study will include the 400 largest wastewater treatment facilities in the country, which may be asked to take up to ten samples near IUs, one sample of domestic-only wastewater, and samples of POTW influent and effluent. All samples must be analyzed with EPA Draft Methods 1633 and 1621, and field quality control samples must also be taken.

NACWA supports the intention of this work but recommends that EPA modify its proposed study design to provide greater value and more actionable data to the Agency, the water sector, and the public at large. This is particularly important to NACWA as public clean water agencies are now proposed to be required to cover the costs of the sampling. The study will be most effective at industrial source identification if EPA considers and evaluates the currently available PFAS source data found in literature, assesses the efforts and data already collected by states, and focuses and narrows sampling efforts to close important data gaps. NACWA's recommendations for the wastewater portion of the study are explained in more detail below, followed by our comments on the biosolids sampling plan.

### **Create a Focused Sampling Approach and Leverage Data Already Available from Utilities**

The current approach proposed by EPA will include a large number of wastewater samples overall, but it is a scattered approach that is a one-time snapshot at each participating utility. Since samples will only be taken once in the proposed study, the results may not be indicative of average PFAS discharges. Taking up to ten IU samples may include most or all of the IUs for small utilities, but for the many utilities that have tens or hundreds of IUs, choosing ten sampling points will not necessarily capture the most significant sources of PFAS or unsuspected sources of PFAS. Although utilities will complete a questionnaire to help determine which IUs should be sampled, many of the most likely industrial sources of PFAS have already been investigated by many utilities and by EPA through its Multi-Industry PFAS Study.

NACWA recommends that EPA redesign the POTW Influent Study so that it will be more likely to capture any currently unidentified industrial sources of PFAS and more thoroughly characterize domestic sources. As a first step, EPA should collect and compile data from the extensive state testing programs that have already been conducted, such as in Michigan, California, and Maine. EPA should also request that utilities voluntarily submit any PFAS sampling data that is not included in these state studies. NACWA's members have indicated a willingness to share the data they have collected with EPA, and some utilities have already

posted their data on publicly available websites. NACWA believes that, with the Association's encouragement, a substantial amount of PFAS sampling data will be submitted voluntarily by utilities to EPA. EPA currently plans to use its authority under Section 308 of the Clean Water Act to compel utilities to submit sampling data. NACWA requests that EPA first collect available data and rely on a voluntary request for data from utilities, rather than immediately using the Section 308 approach. If enough data is submitted voluntarily, the Section 308 approach will be unnecessary.

After analyzing existing data, EPA can move forward with a more focused sampling approach that can fill data gaps and help resolve uncertainty in the existing data. These gaps are likely to include data from certain types of IUs and domestic-only wastewater, and may also include other factors, such as geographic location and utility size. Focusing on the type of sampling that is needed to complete the dataset will result in better decisions about the need for source control measures. The relative magnitude of domestic PFAS sources can also be better characterized if sampling is focused on areas where data does not already exist.

EPA can further focus the data collection effort by staging the collection effort so that utilities first collect influent and effluent samples. If PFAS concentrations are low in the influent and effluent, it may not be necessary to sample any of the IUs discharging to a POTW. More useful data about PFAS sources can likely be collected at POTWs with higher concentrations of PFAS in the influent and effluent.

If EPA begins to collect and analyze existing data now and continues to develop its Information Collection Request (ICR) for a more focused PFAS sampling plan, the timeline for sampling could still approximately follow EPA's current anticipated timeline. NACWA is willing to assist with the collection of existing data from the Association's public agency members.

#### **Include Data from Different Laboratory Analyses**

A national dataset will be most useful if it includes all available data, including samples that were analyzed with different test methods. Before EPA Draft Method 1633 was available, Method 537.1 was commonly used for PFAS analysis of wastewater. Although not specifically designed for wastewater, this method still provides useful data about PFAS concentrations, and test results using this method should not be excluded from the database.

The state of Maine conducted a PFAS study that included sampling at 105 public facilities and 19 private facilities. Method 537.1 was used when the study began in September 2022. In July 2023, duplicate samples were taken so that both Method 537.1 and Draft Method 1633 could be used. Comparing the results of the duplicate samples, the average relative percent difference (RPD) between the two methods was 5.5%. Even when individual samples had a greater RPD, the order of magnitude of the PFAS concentrations was still the same. Method 537.1 performs similarly enough to Draft Method 1633 to be used for source identification purposes. After IUs are identified for potential source control measures, additional sampling will be required, and then Draft Method 1633 can be used for further study of the IUs.

### **Use Toxic Release Inventory Data**

Another source of data that should be considered by EPA is the Toxic Release Inventory (TRI). Since EPA updated the TRI regulations in October to remove the *de minimis* exemption for PFAS reporting, the TRI will be a better source of information for PFAS releases to POTWs. The rule takes effect for the reporting year that begins January 1, 2024, with reports due July 1, 2025. This timeline means that TRI information will be available at approximately the same time that EPA is planning for sampling data to be completed with the POTW Influent Study. Using the existing data from studies that are already completed, along with data voluntarily submitted by POTWs, EPA could phase in a focused sampling plan to fill the data gaps. The most obvious data gaps could be addressed first, then as TRI reporting data becomes available in 2025, additional targeted sampling could be conducted to fill additional data needs.

### **Consider Cost of PFAS Sampling**

NACWA's members are very supportive of EPA's objectives with this study, but they are concerned about the costs to utilities. When EPA first briefed NACWA members on the proposed study in May 2023, EPA's stated intention was to pay for the laboratory analyses of the samples. Utilities were willing to contribute their time to collect and prepare the samples, with the analytical costs covered by EPA. This plan has now changed so that utilities will be paying for all costs associated with sampling and laboratory analysis, creating a significant financial burden for utilities.

Current laboratory analysis costs are estimated as \$500-650 for EPA Draft Method 1633 and \$1,000 or more for EPA Draft Method 1621. For utilities that are asked to sample ten IUs, and utilities that have multiple treatment facilities in EPA's list of the 400 facilities that will be asked to participate in the study, these laboratory analysis costs will add up quickly. These costs are in addition to the cost of the staff time that will be borne by the utilities.

EPA should also consider the current laboratory capacity issues for PFAS analyses. NACWA members have reported extended turn-around times for PFAS analyses at laboratories, and there is also a report of a laboratory refusing to accept additional samples for testing since it had no more analytical capacity for PFAS. Even if laboratories expand their PFAS analysis capabilities, PFAS testing requirements also continue to expand, and capacity may continue to be an issue in the long term.

The focused sampling approach recommended by NACWA will help control the costs to utilities, while maximizing the value of the sampling that is conducted, by collecting only the data that is needed to fill gaps. The focused approach should also help alleviate laboratory capacity issues. NACWA also recommends that EPA consider a source of funding for utilities – especially smaller utilities – that may have a more difficult time absorbing the costs of sampling and laboratory analysis.

### **Biosolids Sampling Program**

While NACWA supports the objectives of the POTW Influent Study to help identify industrial sources of PFAS discharges to POTWs, the Association has concerns about the objectives of the biosolids sampling plan, which is outside of the Effluent Guidelines Program.

The goal of the POTW Influent Study, by design, is to understand the upstream industrial sources of PFAS chemicals coming in as influent to the treatment works. To that end, the Influent Study aims to identify these potential and likely unknown sources of PFAS as a means to begin the longer regulatory and data gathering process of developing effluent guidelines and pretreatment standards. Ultimately, the proposed effort aims to increase knowledge of PFAS concentrations occurring now and mitigate future industrial and commercial PFAS discharges into the wastewater collection system. It is not an effort to investigate PFAS concentrations in biosolids broadly across the country.

NACWA believes that EPA should uncouple the biosolids sampling requirements from the PFAS source sampling effort because it is beyond the scope of developing effluent guidelines. EPA's draft narrative states that it is a goal of the Agency to "better understand PFAS pass through in POTWs to biosolids and effluent." NACWA believes that EPA can develop a better understanding of PFAS pass through by collecting the influent and effluent data – or by simply conducting a literature review – without the need to collect national biosolids data as a part of this study. Further, the biosolids sampling procedures proposed under the POTW Influent Study go far beyond collecting PFAS data. EPA is proposing to compel utilities to test for metals, inorganic anions, total carbon, hydrogen, and nitrogen, as well as total solids, volatile solids, and fixed solids. None of these compounds are related to understanding PFAS pass-through. If EPA moves forward with requiring public utilities to sample their biosolids, NACWA asks EPA to remove the additional analysis beyond PFAS.

NACWA also urges the Agency to finish its biosolids risk assessment for PFOA and PFOS before requiring public agencies to sample and report PFAS concentrations. EPA is currently developing its biosolids risk assessment framework and screening tool to appropriately evaluate risks from exposure to pollutants found in biosolids. For PFOA and PFOS chemicals specifically, the Agency has moved beyond the problem formulation stage – which is a process that defines the problem (source and occurrence), identifies the exposure pathways, and presents data and tools used for analyzing and characterizing the risk. It is also a process that involves significant stakeholder participation and engagement. The next step for the Agency is to complete the full risk assessment for PFOA and PFOS in biosolids. The biosolids data EPA seeks to gather through this POTW Influent Study does not inform EPA's work on risk and will only add to greater public uncertainty.

After Maine broadly banned biosolids land application due to the mere *presence* and fear of PFAS, which are widely found throughout the environment, and not over any scientific finding that the concentrations posed risk to human health or the environment, NACWA has serious concerns about EPA's proposed data collection. In particular, NACWA is concerned about how the public could misconstrue or misunderstand the data collected from biosolids sampling without the Agency having a straightforward and clear plan for communicating its study design, purpose for sampling biosolids, and the known risks of PFAS in biosolids to public health and the environment.

Even without industrial PFAS sources, public clean water agencies receive PFAS through the domestic contributions of households and businesses in their communities. NACWA believes EPA must communicate

the everyday risks of exposure to PFAS the public faces from *all* sources, including PFAS found in consumer products used in commerce today.

If EPA is seeking to mirror Michigan's comprehensive biosolids PFAS sampling program, NACWA believes that the Agency must narrow its scope and uncouple it from the POTW Influent Study. Michigan started a sampling program with a handful of wastewater utilities to better understand if effluent and biosolids were industrially impacted before scaling up to 42 public wastewater agencies in the state. Michigan also conducted a robust stakeholder engagement program with utilities, landowners, and the public to help promote awareness of its strategy and to help communicate what the biosolids data may reveal. EPA must follow a similar path. If the POTW Influent Study reveals PFAS hotspots from new industrial sources, then EPA should complete a separate biosolids study to look more specifically at industrial impacts rather than a costly, broad-sweeping PFAS investigation that will likely result in more public concern than value.

It is also important to note that many public wastewater agencies and NACWA members have already collected or are beginning to assess PFAS concentrations in their influent, effluent, and biosolids. Some states have also started requiring public clean water agencies to sample biosolids. EPA could work collectively with utilities and state regulatory authorities already gathering this information to help inform the broader POTW Influent Study and understand the "pass through" to residuals.

As noted above, NACWA also encourages EPA to rely on the data it receives from the recently updated Toxic Release Inventory that eliminated the PFAS *de minimus* reporting loophole in its work to better understand PFAS in biosolids. Companies that use PFAS will now have to report to the Agency the quantities and concentrations of PFAS – a much more targeted fingerprint of where PFAS originates than requiring public utilities to conduct a costly one-time snapshot to attempt identification of an upstream industrial user. EPA should use this data to inform its work on identifying potential PFAS industrial sources and develop effluent guidelines as necessary.

Thank you for your consideration of these comments and we would welcome the opportunity to discuss them further with you and your team. NACWA looks forward to continued collaboration with EPA on the POTW Influent Study and other efforts to better understand the impact of PFAS on the wastewater treatment process. If you have any questions, please contact me at [cfinley@nacwa.org](mailto:cfinley@nacwa.org) or 202-533-1836, or for questions related to the biosolids study, please contact Emily Rimmel at [erimmel@nacwa.org](mailto:erimmel@nacwa.org) or 202-533-1839.

Sincerely,



Cynthia A. Finley, Ph.D.  
Director, Regulatory Affairs

NACWA Comments on POTW Influent Study

November 29, 2023

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