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To: Office of Ground Water and Drinking Water  
U.S. Environmental Protection Agency

From: Drinking Water and Environmental Health Division  
Michigan Department of Environment, Great Lakes, and Energy

Date: May 26, 2023

Subject: Comments on Proposed PFAS National Primary Drinking Water Regulation;  
Docket No. EPA-HQ-OW-2022-0114

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Drinking Water and Environmental Health Division (DWEHD) appreciates the opportunity to review and provide comment on the Environmental Protection Agency PFAS National Primary Drinking Water Regulation Rulemaking, as published in the Federal Register on March 29, 2023 (Vol. 88, No. 60, Wednesday, March 29, 2023).

EGLE DWEHD stands in support of the effort to establish a National Primary Drinking Water Regulation (NPDWR) for per- and polyfluoroalkyl substances (PFAS) based on the best available peer-reviewed scientific study, as outlined in the aforementioned publication. EGLE DWEHD respectfully provides the following comments for EPA's consideration.

#### **A. EPA Preliminary Regulatory Determination for Additional PFAS**

Having reviewed Section III of the proposed NPDWR, EGLE DWEHD agrees with EPA's findings that four additional PFAS compounds (HFPO-DA, PFBS, PFNA, and PFHxA) meet the statutory requirements for regulatory determination as established by the Safe Drinking Water Act. Furthermore, the inclusion of these four additional PFAS compounds is consistent with the regulatory determination established by the State of Michigan during the establishment of its own MCLs in 2020.

Consistent with Michigan's regulatory determination, EGLE DWEHD recommends that EPA consider including PFHxA, in addition to those four PFAS compounds proposed in the NPDWR, based on those same three statutory requirements established by the SDWA:

1. Some people who drink water containing PFHxA in excess of Michigan's MCL could experience adverse health effects. For the purpose of developing Michigan's PFHxA MCL, an independent panel of scientists determined that current toxicity data was sufficient and utilized a risk assessment based specifically on renal effects.<sup>i</sup>

2. Michigan's statewide PFAS survey results (2018 – 2020) indicate that PFHxA occurred in 10% of samples, and compliance monitoring results (2020 – present) indicate that PFHxA occurs in 4.1% of samples.
3. The regulation of PFHxA represents a meaningful opportunity for health risk reduction. EPA-approved analytical methods, treatment technologies, and achievable steps to manage drinking water all exist and are available to meet this challenge.

It is the experience of EGLE DWEHD that laboratory capacity has been sufficient for Michigan's needs. Based on projected sampling under the proposed NPDWR, this would remain true even in a case where our state must rely solely on State of Michigan Laboratory capacity. However, this resource may not be available for all states and should be considered during rule development.

#### **B. Maximum Contaminant Level Goals/Maximum Contaminant Levels for 6 PFAS**

Having reviewed Sections V and VI of the proposed NPDWR, EGLE DWEHD generally agrees with EPA's proposed maximum contaminant level goals (MCLGs) and maximum contaminant levels (MCLs) for four of the six PFAS compounds, (PFOA, PFOS, HFPO-DA, PFHxS) based on the best available peer-reviewed scientific study.

In the case of PFBS and PFNA, Michigan established 2020 MCLs of 420 ng/l and 6 ng/l respectively, initially proposed by an independent panel of scientists.<sup>i</sup> These recommendations were developed based on a thorough review of the best available peer-reviewed scientific studies at the time and utilized in EGLE's subsequent rulemaking efforts. As these MCLs are below the MCLGs proposed by EPA in the NPDWR, EGLE DWEHD asks EPA to consider these lower values for calculating its proposed MCLGs/MCLs.

Additionally, EGLE DWEHD requests that EPA further speak to the proposed use of a general hazard index for the four PFAS chemicals versus multiple target organ toxicity-specific indexes, and that EPA speak to the exclusion of PFOA and PFOS from hazard index calculations. Regarding EPA's proposed requirement to report to tenths of a part per trillion for the MCLGs, as well as the MCLs, EGLE DWEHD recognizes both the benefits and issues associated with this approach. By including this additional significant figure, running annual average calculations may be compared to MCLs and associated trigger levels without the need for extra rounding, resulting in more straightforward compliance determinations. However, in the case of analytical results the additional significant figure does represent a level of implied precision which has not been demonstrated by laboratories conducting EPA-approved drinking water analytical methods.

#### **C. Occurrence of 4 Additional PFAS**

In response to EPA's request for occurrence information, and having reviewed Section VII of the proposed NPDWR, EGLE DWEHD has reviewed three years of PFAS MCL compliance monitoring data collected under Michigan's SDWA. This data indicates that 11 public water supplies (8

community water supplies and 3 non-transient noncommunity water supplies) would potentially exceed the proposed HI-based MCL *alone*.

#### **D. Monitoring and Compliance Requirements**

Having reviewed Section IX of the proposed NPDWR, EGLE DWEHD presents the following comments for consideration:

1. EGLE DWEHD requests clarification regarding how the proposed “Trigger Level” will be used, both during initial monitoring and ongoing compliance monitoring. The language in Section IX appears to present this threshold as a single point in time, for which a detection above would lead to a monitoring decision. Is this the case, or would the “Trigger Level” instead be calculated using a running annual average?
2. “Trigger Level” is a new definition within the SDWA. EGLE DWEHD proposes using “detection above X% of the MCL” to identify the threshold, rather than establishing an additional definition.
3. EPA proposes a “Trigger Level” at 1/3 of each MCL. This is presented as appropriate based on the ability of individual laboratories to detect at levels well below the practical quantitation limit (PQL). However, it is unlikely all laboratories are capable of this level of reliable detection, given their requirement to meet the 4.0 ng/l PQL threshold. Regulations should be based on values all laboratories can and are expected to meet. Otherwise, it may present an inequity for supplies, and their ability to potentially reduce monitoring. EGLE DWEHD proposes a “Trigger Level” of 1/2 each MCL, to alleviate this and to maintain consistency with other portions of the SDWA.
4. Michigan’s SDWA requires a reporting limit of 2 ng/l for all seven PFAS compounds with MCLs. For running annual average calculations, would it be more appropriate to include numerical values for any detections below the PQL but above this RL in Michigan?
5. EGLE DWEHD encourages EPA to consider including PQLs of 2.0 ng/l, consistent with Michigan’s SDWA, considering these have been successfully employed since 2020.
6. Laboratory performance evaluation tolerances (70-130%) are concerning given the PQL = MCL for PFOS and PFOA. It seems there is no margin for error at this level. At the MCL for PFOS (4 ppt), the reported value could range from 2.8 to 5.2 ppt and be within QC tolerances but result in the sample being in or out of compliance, respectively.
7. EGLE DWEHD requests simplification of proposed rule language and proposes that EPA re-word 141.XX (Mon Req)(b)(i) to include GUDI and strike (b)(iii). We also suggest the following amended language for (i): “All surface water systems, all GUDI systems, and groundwater systems serving greater than 10,000 must take four consecutive quarterly samples ...”
8. Regarding flexibility during initial monitoring for groundwater supplies serving a population less than 10,000, EGLE DWEHD generally does not have issue with EPA’s proposed approach. However, for reduced compliance monitoring purposes, EGLE DWEHD proposes an approach based on source vulnerability rather than PWS size.
  - a. EPA proposes flexibility for groundwater supplies not detecting PFAS above the “Trigger Level,” with those serving 3,300 or fewer permitted to sample once per

three-year period AND those serving more-than 3,300 required to sample twice per three-year period. EGLE DWEHD proposes instead that EPA maintain a consistent requirement for sampling frequency across size categories in groundwater PWS.

- b. Similarly, EGLE DWEHD proposes that surface water supplies and those groundwater supplies under direct influence (GUDI) not detecting PFAS above the trigger level also maintain a consistent sampling frequency requirement, although higher than that of groundwater supplies. EGLE DWEHD recommends EPA consider a reduced frequency of no less than annual sampling for these supplies.

By focusing on vulnerability as the determining factor, EGLE DWEHD posits that the proposed rule would be more protective of human health. In the case of surface water and GUDI supplies, unexpected changes in PFAS contamination may result from release events, changes in currents/weather patterns, or other environmental factors.

- 9. The proposed rule includes a required 90-day minimum interval for consecutive compliance samples. It is the opinion of EGLE DWEHD that this requirement presents a serious implementation issue. With quarters having between 90 and 92 days, a maximum of 2 days would be available for flexibility in quarterly sampling. Taking weekends and holidays into account, this represents a significant lack of flexibility and a likely source of schedule violations. Also note that, should a supply sample later in a quarter, they would be unable to mitigate this in the future as they would be forever required to sample at the end of each quarter to meet the 90-day requirement. EGLE DWEHD asks that EPA consider a timeframe that allows flexibility, while not permitting back-to-back sampling, such as a minimum of 30 days between sampling events.

#### **E. Safe Drinking Water Right to Know**

Having reviewed Section X of the proposed NPDWR, EGLE DWEHD agrees with EPA's proposed public notification requirements, as these are largely consistent with those established for other NPDWR and for PFAS MCLs in Michigan.

In our experience, the need for PWS to effectively communicate information related to PFAS monitoring and compliance requirements is of utmost importance. EGLE DWEHD requests that in coordination with any final version of the proposed NPDWR, EPA provides clear and concise language for supplies to use in developing their communications, as well as for guiding PWS in the requirements around collection, interpretation, and submission of PFAS samples and sample results.

#### **F. Treatment Technologies**

Having reviewed Section XI of the proposed NPDWR, EGLE DWEHD agrees with EPA's proposed list of best available treatment technologies for PFAS removal in drinking water. These are largely consistent with those included in Michigan's SDWA for PFAS.

## **G. Rule Implementation and Enforcement**

Having reviewed Section XII of the proposed NPDWR, EGLE DWEHD generally agrees with EPA's summary of requirements for primacy, record keeping, reporting, exemptions, and extensions. Regarding Table 1 of 141.904: EGLE DWEHD requests that EPA allow state agencies to calculate items 2, 3, and 4, rather than have supply report these values. Compliance calculations are complex, and our experience is that water supplies may calculate incorrectly and take (or not take) action based on incorrectly calculated values. There is precedent in some other rules to allow states to calculate values.

EGLE DWEHD requests that EPA, when developing agency data reporting obligations, separate tracking and reporting of monitoring violations from reporting violations. This prevents confusion within state agencies and for the public by providing clarity about what type of violation has occurred.

## **H. Health Risk Reduction and Cost Analysis**

Having reviewed Section XIII of the proposed NPDWR, EGLE DWEHD does not have major issues with EPA's Health Risk Reduction and Cost Analysis (HRRCA). However, based on EPA's definition of a small system, it is possible that the impact of the proposed NPDWR on very small PWS (e.g., manufactured housing communities, child-care providers, schools) may be significant. EGLE DWEHD asks that EPA consider these categories of PWS when making final determinations.

The economic analysis indicates that, "costs presented include those expenses incurred by PWSs to (1) monitor for PFAS, (2) inform consumers, (3) install and operate treatment technologies, and (4) perform record-keeping and reporting to comply with the PFAS NPDWR; and the costs incurred by states (or primacy agencies, i.e., states with authority to implement and enforce SDWA regulations) to implement the rule". Michigan notes implementation of new drinking water standards carry beyond the Safe Drinking Water Act and may result in changes being made to related programs. For example, EGLE believes that revised MCLs might eventually result in changes being made to Water Quality Values (WQVs) to protect surface waters and requirements to protect groundwater. Michigan already has three WQVs for PFOS, PFOA, and PFBS and lists seven analytes to protect groundwater for drinking water. Anticipated revisions to WQVs and other conditions, due to the draft MCLs, will change treatment costs to protect surface waters, revise treatment limits to protect groundwater, and may also result in revised conditions to allow for beneficial reuse of biosolids. EGLE believes that all costs should be reflected in the analysis to determine appropriate MCLs.

## **I. General Comments**

Expanding regulatory implementation requirements is challenging for agencies and regulated entities. EPA should provide robust data management tools and guidance before the rules take effect. Successful and consistent implementation of the rules will require a functional data management system and final data entry instructions prior to implementation.

Significant resource investment will be necessary for successful implementation of these regulations. EPA must commit to providing additional resources to regulating agencies in the form of federal funding for human resources, extensive guidance materials and training, and data management upgrades.

A significant portion of this federal funding will be required to effectively support public water supply system upgrades, necessary to address the new limits proposed in this NPDWR. PFAS analytical testing alone represents a significant burden for many of our small supplies, especially those non-community water supplies operating as schools and childcare providers. To ultimately address PFAS contamination in source water may require additional challenges be met, including contamination investigation, engineering study, treatment design/permitting, consolidation efforts, or new well construction.

While EPA has taken steps toward providing funding opportunities to meet these challenges, it is likely that the need outweighs the current availability of federal resources. More is needed. It is the hope of EGLE DWEHD that EPA will remain an active partner for all states, in providing support and resources throughout implementation of the NPDWR and beyond.

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<sup>i</sup> [\*Health-Based Drinking Water Value Recommendations for PFAS in Michigan\*](#), a Report by the Michigan Science Advisory Workgroup, July 2019.