BCLP. Client Intelligent

BCLPemerging.com

EPA SETS NATIONAL LIMITS FOR CERTAIN PFAS IN DRINKING WATER

Apr 17, 2024

On April 10, 2024, the United States Environmental Protection Agency ("EPA") issued its long-anticipated National Primary Drinking Water Regulation ("NPDWR") establishing Maximum Contaminant Levels ("MCLs") for certain PFAS substances in drinking water. The final NPDWR reflects EPA's responses to the over 120,000 public comments that it received on its March 2023 original proposal. There are several important differences between the proposal and the final rule, as well as several important aspects of the final NPDWR that businesses should understand:

- The 4 parts per trillion ("ppt") MCLs for PFOA and PFOS are below the limits set by various states. These MCLs and the other MCLs are legally enforceable. Additionally, EPA has set non-enforceable, health-based Maximum Concentration Level Goals ("MCLGs") at zero (0) for PFOA and PFOS;
- EPA included individual MCLs for three additional PFAS substances: PFNA, PFHxS, and HFPO-DA;
- EPA has retained the Health Index ("HI") regulatory concept for mixtures of two or more of PFHxS, PFNA, HFPO-DA, and PFBS;
- There will be $1 billion dollars of funding from the Bipartisan Infrastructure Law ("BIL") earmarked for testing and treatment for both Public Water Systems ("PWSs") and private owners to address PFAS contamination; and
- EPA has given public water systems ("PWSs") additional time to investigate and implement controls to get into compliance with the new MCLs.

EPA is hosting three webinars to discuss this final rule on April 16, April 23, and April 30, 2024.

EPA FINALIZED LIMITS FOR SIX PFAS SUBSTANCES

The final rule establishes the following MCLs and MCLGs for the six substances:

Compound	MCLs (enforceable)	MCLGs (non-enforceable)

PFOA	4.0 ppt	0 (Zero)
PFOS	4.0 ppt	0 (Zero)
PFHxS	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
HFPO-DA (known as GenX Chemicals)	10 ppt	10 ppt
Mixtures containing two or more of these four PFAS substances: PFHxS, PFNA, HFPO-DA, and PFBS	1 (unitless) Hazard Index	1 (unitless) Hazard Index

EPA'S MCLS AND MCLGS FOR PFOA AND PFOS ARE EXTREMELY LOW

Although certain states have already implemented low MCLs for PFOA and PFOS, none are as restrictive as EPA's 4 ppt standard. However, the MCLGs that EPA has set for these two compounds are even lower, and perhaps more significant from a long-term perspective. As EPA explains in their March 2023 proposed rule, MCLGs are set at "the level at which no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety." It is important to note MCLGs are purely advisory and do not impact drinking water systems' compliance obligations.

However, EPA has set the MCLGs for PFOA and PFOS at zero – the same MCLG for other contaminants such as arsenic, lead, legionella, PCBs, and uranium - clearly signaling EPA's position on the potential toxicity of these compounds. EPA has also previously indicated that it intends to continue to lower the MCLs as testing and treatment technology allows with the goal of eventually aligning them with the MCLGs.

EPA INCLUDED MCLS FOR THREE PFAS SUBSTANCES IN ADDITION TO PFOA AND PFOS

In perhaps the most significant departure from the version of the rule proposed in March 2023, the final rule sets individual MCLs and MCLGs for PFHxS, PFNA, and HFPO-DA, rather than solely regulating all of them (along with PFBS) using a HI approach. The MCLs and MCLGs are once again quite low, all set at 10 ppt.

EPA RETAINED THE HEALTH INDEX APPROACH FOR MIXTURES OF FOUR PFAS

PFHxS, PFNA, HFPO-DA, and PFBS have been the subject of regulatory attention at both the state and federal levels, with some states issuing MCLs for these substances and EPA conducting health

studies. Therefore, it was no surprise that EPA's original proposed rule included an approach to regulate these compounds in drinking water. What was surprising to some was the fact that EPA's original proposal was to regulate the presence of those four chemicals using a HI.

In the final rule EPA retained the combined HI limit of one for mixtures of four PFAS substances (PFHxS, PFNA, HFPO-DA, and PFBS). EPA took this approach based on its conclusion that PFAS substances are often commingled which can result in an additive health impact. Unfortunately, the process for calculating the HI from any given sample is quite complicated. EPA's equation is:

$$HI = \sum_{i=1}^{n} HQ_i = \sum_{i=1}^{n} \frac{E_i}{RfV_i}$$

Where:

HI = Hazard Index

HQ_i = Hazard Quotient for chemical i

E_i= Exposure, i.e., dose (mg/kg/day) or occurrence concentration, such as in drinking water (in milligrams per liter or mg/L), for chemical i

RfV_i= Reference value (e.g., oral RfD or MRL) (mg/kg/day), or corresponding HBWC; e.g., such as MCLG or chemical i (in mg/L)

Practically speaking, this means that drinking water systems will need to calculate a Hazard Quotient for each chemical in a sample, and if the total of those values is greater than 1.0, then the sample exceeds the MCL. Where things get tricky is that the Hazard Quotient is calculated using the concentration (or dose) of the PFAS substances in the sample divided by an established risk factor, so the Hazard Quotient for each PFAS substance will vary from sample to sample.

EPA INCLUDED BOTH FUNDING AND PHASED IMPLEMENTATION PROVISIONS TO HELP PWSS WORK TOWARDS COMPLIANCE

In another important departure from the original proposal from 2023, EPA has given PWSs an additional two years to get into compliance with the new limits. The following are the relevant deadlines under the final rule:

- **2024** (specific date unknown at this time). This rule will become effective sixty (60) days from the time it is published in the Federal Register (specific date unknown at this time).
- **2027**

- PWSs must complete initial monitoring for these six PFAS substances; and
- PWSs must provide notification to the public regarding any PFAS contamination, such as including this data in an annual water quality report.

- **2029**
  - PWSs must install and implement solutions to comply with the MCLs, and will be requires to report any violations; and
  - PWSs must provide notification to the public of any drinking water violations.

In addition, EPA noted that there would be $1 billion available in grants through dedicated funding in the BIL for addressing PFAS and other emerging contaminants. Those funds will be available to state PWSs as well as to private wells.

HOW DO THESE LIMITS IMPACT BUSINESSES?

MCLs set the maximum concentration of a given contaminant that can be present in drinking water. Drinking water systems are ultimately responsible for meeting the applicable MCLs and are required to ensure that drinking water distributed to the public meets these limits. State agencies often include discharge limits for releases to drinking water sources to ensure that the drinking water provider can comply with the MCLs, which means that industrial dischargers across the country may start seeing PFAS limits in their NPDES permits because of the new standards.

In addition, several drinking water systems have already filed suits against upstream industrial and municipal dischargers seeking to recover the cost of filtration systems that they argue they must install to address PFAS substances. With respect to the new limits, EPA estimates that "between about 6% and 10% of the 66,000 public drinking water systems subject to this rule may have to take action to reduce PFAS to meet these new standards."

CONCLUSION

By finalizing these MCLs and MCLGs for PFAS, EPA has achieved one of its main objectives for regulating PFAS. PWSs across the country are now subject to a uniform regulatory standard for the presence of these compounds in drinking water. The inherent cost and complexity of compliance is expected to have ripple effects across drinking water systems and industrial dischargers that will likely take years to resolve.

For more information on PFAS chemicals, and the regulatory and liability risks that they pose, please visit our PFAS webpage. If you have a question about how to manage PFAS risk in any

jurisdiction, contact Tom Lee, Bryan Keyt, Erin Brooks, or any other member of our PFAS team at BCLP.

RELATED PRACTICE AREAS

- PFAS Team

MEET THE TEAM

Thomas S. Lee

San Francisco

tom.lee@bclplaw.com
+1 415 675 3447

Bryan E. Keyt

Chicago

bryan.keyt@bclplaw.com
+1 312 602 5036

Erin L. Brooks

Chicago / St. Louis

erin.brooks@bclplaw.com
+1 312 602 5093

John R. Kindschuh

St. Louis

john.kindschuh@bclplaw.com
+1 314 259 2313
