Utilities see new costs in proposed PFAS water rule

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The EPA's long-anticipated proposal to regulate a new category of toxic substances in drinking water may shift the financial burden onto utilities and ratepayers, industry groups warned.

On March 14 the agency proposed regulations under the Safe Drinking Water Act that would set enforceable regulations for six per- and polyfluoroalkyl compounds. For the two most common PFAS chemicals, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), it is proposing an enforceable limit of 4 parts per trillion, while for four others it is proposing a limit for a mix of them.

Used in a wide array of industrial applications—including firefighting foam, nonstick cookware and waterproof coatings—PFAS have been referred to as "forever chemicals" for their chemical structure which allows them to persist in both the human body and the environment. Exposure to PFAS has been linked to a number of adverse health outcomes including immune system dysfunction, impaired child development and cancer, according to the National Institutes of Health.

Under the rule utilities would be required to monitor for the six PFAS chemicals and treat water if concentrations exceed the maximum contaminant level. While some states have instituted their own standards for PFAS at less stringent levels than the proposed EPA regulations, the finalization of a federal MCL would require additional treatment technology.

At a March 15 Senate Environment and Public Works hearing on the implementation of the 2021 bipartisan infrastructure law, EPA Assistant Administrator for Water Radhika Fox said that now is an "exciting time" to be moving forward the drinking water rule because the funds are provided under the law.

"We're working very actively with states and local communities to make sure that the $9 billion that you all dedicated to addressing PFAS and emerging contaminants is out there, that water systems are accessing those funds and getting these treatment technologies in place," Fox said.

In the rule the agency estimated the total annualized costs would range from $772 million to $1.2 billion, while the economic benefits would range from $908 million to $1.2 billion. The SDWA requires the agency to conduct an economic analysis to determine whether the costs of compliance outweigh economic benefits.

However, industry groups representing water utilities immediately expressed concerns that the proposed standards would exceed the additional funding provided by the agency. The American Water Works Association said the rule as proposed would require more than 5,000 water systems to develop new water sources or install advanced treatment technologies. Another 2,500 water systems in states with established standards would need to adjust their existing PFAS treatment systems.

Cost projection

A study released by AWWA on March 7 found that the estimated national cost for water systems to install treatment systems to remove PFOA and PFOS to levels required by the EPA proposal would exceed $3.8 billion annually.

"The vast majority of these treatment costs will be borne by communities and ratepayers, who are also facing increased costs to address other needs, such as replacing lead service lines, upgrading cybersecurity, replacing aging infrastructure and assuring sustainable water supplies," the AWWA said.

EPA Administrator Michael S. Regan made the announcement in Wilmington, N.C., a city that has been ground zero for the discussion over PFAS contamination due to contamination from a Chemours Co. plant. The Cape Fear Public Utility Authority has addressed PFAS contamination with the installation of granular activated carbon filters,

which cost the agency $43 million upfront with annual operating costs of $5 million.

The Association of Metropolitan Water Agencies said that if about 16 utilities of similar size to Cape Fear nationwide implement comparable treatment techniques, the total cost would exceed EPA's low-end estimate for costs.

Other technologies to reduce PFAS in drinking water, such as reverse osmosis and ion exchange, also come with hefty price tags.

"Ultimately, without more federal support for upgrading current treatment technologies, average Americans will have to pay the cost of further treatment through higher rates for their water," AMWA CEO Tom Dobbins said in a statement.

Water and wastewater utilities previously raised concerns about the EPA's proposal to regulate PFAS under the law governing Superfund sites would also raise costs for compliance.

When reached for comment the EPA pointed to the $9 billion in bipartisan infrastructure law funding and the economic analysis, adding that the economic benefits of $1.2 billion may be an underestimate since it could not quantify all the potential health benefits.

"EPA is seeking public comment on the proposed rule, including the economic analysis. The proposed rule does not require any actions for drinking water systems until the rule is finalized. Once the rule is finalized, water systems would have three years to be in compliance with the MCLs," the agency said.

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