PFAS ROADMAP

The U.S. EPA has announced Final National Primary Drinking Water Regulation establishing Maximum Contaminant Levels (MCLs) for six PFAS in drinking water: PFOA, PFOS, PFHxS, PFNA, and HFPO-DA as contaminants with individual MCLs, and PFAS mixtures containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS using a Hazard Index MCL.

Practical Steps Towards PFAS Compliance



Assessment

Assessment establishes the extent of drinking water PFAS contamination and the overall risk posed to utilities and the communities they serve. This phase includes a comprehensive regulatory review of the Final PFAS Rule along with any local, state, and other jurisdictional policies that may influence compliance requirements. A thorough characterization of the presence and speciation of PFAS in source and finished waters will then provide key insights into identifying best management approaches. Furthermore, PFAS "fingerprinting" and fate-and-transport modeling may identify potential dischargers and other sources to the watershed, opening management and partnership opportunities. Transparency and collaboration during this phase may provide cost share opportunities for mitigation strategies and reduce or eliminate future PFAS discharges to sources of supply.

Planning

Planning identifies viable alternatives for an overall PFAS compliance strategy. USEPA's all-of-agency approach to PFAS regulation will eventually drive a host of compliance activities that encompass all water sectors and beyond. Manufacturers, dischargers, farmers, and other receivers of PFAS will all have a role to play in mitigating this issue. Primacy agencies must also act quickly to develop their own policies, either creating or adapting PFAS primacy regulations that address the new rule. As a community-wide challenge, PFAS provides unprecedented opportunity for collaboration. Whether utilities are considering supply augmentation, watershed monitoring programs, source control, pre-treatment programs, or common-sense policymaking – planning for effective PFAS compliance may identify opportunities to provide more holistic, sustainable solutions by reducing environmental discharges and facilitating cost sharing discussions. Regardless of strategy, this rule will tax the already limited resources of drinking water utilities. Planning should consider compliance needs comprehensively and identify how and when they will be met, whether they are financial, staffing, analytical, or material/equipment.

Implementation

Implementation puts into practice the best strategies identified during the planning process. This phase may include the design, construction and operation of necessary capital improvements. Management strategies for PFAS-laden treatment residuals would be established, as necessary. We do have an opportunity to remove PFAS completely from the water cycle when we consider destruction technologies. In addition, supply management, source control programs, and policy updates (if applicable) are other means to reduce PFAS loads to water supplies and further reduce long-term contamination risks. Successful implementation results in satisfied regulatory requirements and community expectations.

Maintain

The Final PFAS Rule, a growing public awareness on these contaminants, and an ever-increasing list of PFAS that pose (or may pose) health risks to drinking water customers presents a dynamic challenge to utilities. Those hoping to maintain long term PFAS compliance will benefit from an ongoing regulatory and policy review, sustained monitoring of water supplies, continued development of regional partnerships, and an intentional practice of strategy reassessment and optimization.