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to the

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Celebrating the 50th Anniversary of the Safe Drinking Water Act

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Introduction

Good morning, Chairman Carper, Ranking Member Capito, and Members of the Committee. My name is Cathy Tucker-Vogel, and I am a Past President of the Association of State Drinking Water Administrators (ASDWA), whose 57 members include the 50 state drinking water programs, five territorial programs, the Navajo Nation, and the District of Columbia. ASDWA's members work on the front lines every day to protect public health and drinking water through implementation of the Safe Drinking Water Act (SDWA).

I am also the Drinking Water Administrator for the State of Kansas, where I have worked for over 30 years. I direct statewide programs that implement SDWA through regulatory oversight of 961 public water supply systems and approximately 2,000 water operators.

Thank you for this opportunity to provide ASDWA and its members' perspective on celebrating 50 years of the Safe Drinking Water Act. The provision of safe drinking water is critical for public health protection, as well as economic growth and stability. My testimony today will highlight the successes state drinking water programs achieved through the implementation of SDWA, review some of the challenges experienced, and provide suggestions for future actions to help meet these challenges.

The 50th anniversary of the SDWA provides an opportunity to celebrate successes and identify approaches to meet new and ongoing challenges now and into the future. After the SDWA was signed into law in 1974, the EPA developed the first National Interim Primary Drinking Water Regulations (NIPDWR). This first set of regulations published December 24, 1975, consisted of 8.5 pages, and set maximum contaminant levels for 18 contaminants. In comparison, the most recent publication (July 2024) of 40 CFR Part 141 is 343 pages long and regulates over 90 contaminants. The PFAS regulation alone, published in April 2024, is 226 pages which includes the preamble and other supporting information.

Today, the number of regulated contaminants, combined with the complexity of compliance requirements, has significantly improved tap water safety, but places an oversize burden on state programs and public water supply systems. The 90 plus contaminants now regulated under SDWA have variable monitoring frequencies, locations, and compliance determinations. This creates a significant workload for water systems and state agencies to ensure compliance.

Safe Water Drinking Act Successes

The SDWA has been amended several times since 1974 with some of the most significant changes in the 1996 amendments. The 1996 amendments made several changes to the SDWA including a risk-based process for development of standards, assessing drinking water sources, informing customers of drinking water quality, addressing nonviable small water systems, developing the state drinking water revolving funds, and improving EPA's and states' capacity to administer the program. Primacy agencies and public water supply systems rely heavily on three of the programs created in the 1996 amendments to help ensure compliance with regulations and enhance public health protection.

First, the Drinking Water State Revolving Fund (SRF) is the foundation for implementation of state drinking water programs. First and foremost, the SRF was established in the SDWA to provide funding to assist water systems comply with drinking water regulations. Since its inception in 1997, the SRFs have provided $28.6 billion in federal investments through capitalization grants, which translates to $57.3 billion in funding for water systems to make

much-needed infrastructure improvements. A total of 19,560 assistance agreements have provided low-cost financing, with 36% of the funding provided to state-defined disadvantaged communities. In addition to providing below market interest rates, the SRFs have also provided $5.1 billion in additional subsidy to water systems to help them achieve compliance with regulations, encourage regional projects and/or address aging infrastructure in the form of grants or loan forgiveness. The SRFs frequently support necessary drinking water infrastructure projects in small, rural communities helping them stay resilient against the many challenges they face.

Second, one of the most helpful programs established by the 1996 amendments is the Capacity Development Program. The amendments require states to develop and implement a strategy to help water systems achieve and maintain technical, financial, and managerial (TFM) capacity. Every state strategy is different and designed to meet the unique needs of water systems within each state. Under their capacity development programs primacy agencies have developed technical assistance approaches to encourage implementation of asset management programs, provide regional planning assistance, implement rate-setting assistance, conduct board and council education programs, provide on-site technical assistance, and operator training. Many states have developed assessment tools that are used to help identify water systems that are experiencing challenges achieving and maintaining TFM capacity. Through these assessments states can direct technical assistance to water systems most in need of capacity building, which in turn helps keep them in compliance with drinking water regulations. In addition, the SDWA prohibits awarding loans to water systems that do not demonstrate TFM capacity, unless the loan is conditioned to require the water system to address the cause of the lack of TFM capacity. Again, small, rural systems especially have benefited from assistance provided through implementation of the state capacity development strategies.

Third, Congress recognized that a well-trained and qualified workforce is required for the operation and maintenance of public water supply systems to ensure compliance with drinking water regulations. The operator certification provisions of the 1996 amendments require each state to develop a program for the certification of drinking water operators and ensure that each water system is under the supervision of a certified operator. Operator certification programs consist of training, examination, work experience, and continuing education requirements. As a result of the operator certification program requirements in the SDWA, public water supply systems are better positioned to provide drinking water to their customers that complies with drinking water regulations.

Implementation of the SDWA during the past 50 years, and especially since the 1996 amendments, has significantly improved public health protection. The corrosion control requirements in the 1991 Lead and Copper Rule (LCR) have reduced the exposure to lead from drinking water by 70 percent. In a national study, the median value at sampling locations across the country decreased from > 20 µg/L in 1992‑93 to 6 µg/L after 2000 (Brown, et al, 2013). The filtration and disinfection requirements in the 1989 Surface Water Treatment Rule (SWTR) and its enhancements have essentially eliminated Giardiasis and Cryptosporidiosis from drinking water. Finally, even with the increases in the number and complexity of the regulations, the national compliance rate has improved over the last 30 years. The national compliance rate with health-based standards has increased from 94% in 1996 to 96% in 2022, according to EPA's National Compliance Report.

The success of the drinking water programs and improvements in compliance rates discussed above would not be possible without the provision in the SDWA that allows primacy agencies to use a portion of the SRF capitalization grants to support state drinking water programs. These

set-asides allow primacy agencies to implement capacity development strategies, provide operator training and technical assistance and support primacy agency administrative activities.

Safe Drinking Water Act Implementation Challenges

One of the biggest challenges primacy agencies and public water supply system face is the number and complexity of new and proposed drinking water regulations. In the past 3 years, EPA has published four final regulations, published one new proposed regulation, and is under court deadlines to publish two more proposed rules in in 2025. It's important to note that Congress mandated some of these changes.

Four Final Regulations

- Lead and Copper Rule Revisions (LCRR) – January 2021
- Per- and Polyfluoroalkyl Substances (PFAS) Rule – April 2024
- Consumer Confidence Report Rule (CCR) – May 2024
- Lead and Copper Rule Improvements (LCRI) – October 2024

Proposed Regulation

- Water System Restructuring Assessment Rule – May 2024

Anticipated Regulation – 2025

- Revisions to the Microbial and Disinfection Byproducts Rules
- Perchlorate Rule

Primacy agencies and water systems do not have the financial or human resources to meet the increased implementation demands these new and proposed regulations will impose on their programs. Primacy agencies struggle to hire engineers experienced in water system treatment plant design review as well as additional personnel to oversee rule implementation. Small water systems will struggle to find operators with the knowledge and experience needed for the advanced treatment processes that will be required for implementation of the new rules.

While compliance with "older" regulations generally meant checking monitoring data against a number, the more recent regulations require a higher level of effort for consultations, reviews, etc. The recent Lead and Copper Rule Improvements (LCRI) and the associated requirements for tracking approximately 20 different certifications water systems must report to primacy agencies is in addition to tracking progress on lead service line replacements. This workload places an undue burden on state programs with more work, but with shrinking resources. ASDWA conducted a Cost of States' Transactions Study (CoSTS) that estimates that the LCRI will place a significant cost and time burden on states annually, estimating a total of 5,141,769 state staff hours will be needed each year, or 71% of the estimated available state staff time. This time burden translates to over $300 million a year for state implementation, more than three times the amount of Public Water System Supervision (PWSS) funding allocated for implementation of the Safe Drinking Water Act (SDWA) by Congress. Additionally, CoSTS estimates that the rule will need approximately 799,115 state hours, equating to about $48 million for initial implementation and transition to the new rule.

State primacy agencies rely on federal funds allocated by Congress to operate their drinking water programs. Some primacy agencies also have state funds available to supplement federal funding to operate their drinking water programs. Federal funding sources include the PWSS Grant and the Drinking Water State Revolving Fund (DWSRF) set-asides. Congressionally

Directed spending has had a negative impact on the availability of set-asides from the base SRF capitalization grant to support state drinking water programs. Since the implementation of Congressionally Directed spending in 2022, the base SRF capitalization grants have seen a 45% reduction. Fortunately, primacy agencies can use set-asides from the Infrastructure Investment and Jobs Act (IIJA) capitalization grants to replace the funding lost from the base grant. However, states will experience major funding cuts when IIJA ends in FY 2026. This could come right when states most need the funding to support implementing the new rules listed above. Without full restoration of SRF base capitalization grants states will have to begin cutting programs and services such as capacity development, operator certification and the provision of technical assistance. More importantly, reduction in the SRF base program grant reduces the funding available for infrastructure improvement projects resulting in fewer loans to water systems to address compliance issues. Losing this funding will impact small, rural communities the most.

Another challenge with use of the IIJA funds is the requirement that additional subsidy be awarded only to state defined disadvantaged communities. In some instances this requirement resulted in loans going to projects such as water line replacement for a disadvantaged community, rather than to a community that is not considered disadvantaged with an MCL violation. While waterline replacement projects help disadvantaged communities with water loss and resiliency, the SRF programs need the flexibility to award additional subsidy to address compliance issues regardless of disadvantaged community status. Even though a small community may not be defined as disadvantaged the cost of addressing compliance issues may be unaffordable without additional subsidy.

The Public Water Supply Supervision (PWSS) Grant is the other primary federal funding source primacy agencies depend on for program implementation. While the PWSS grant allocations have increased somewhat (16%) over the past 20 years, this critical source of funding for state programs has not kept up with inflation, the increased demands from the new regulations and programs, and the costs associated with maintaining a state drinking water program. The PWSS grants are used to support staff salaries including rule managers, inspectors, support staff, and engineers. In Kansas, the PWSS grant partially supports inspectors and district office operations related to public water supply oversight

As with many industries, public water supply systems are experiencing prolonged workforce shortages. Public water supply systems of all sizes are experiencing staff shortages due to retirement or departure from the water sector for higher paying jobs in other industries that don’t require 24/7/365 oversight. Small systems are especially hard hit due to the lack of financial resources to attract and retain younger workers. The loss of institutional knowledge resulting from retirements poses additional risk to public health protection as less experienced operators are required to operate complex water treatment facilities. Hiring new employees when funding is limited poses a concern for the longevity and safety of many drinking water systems.

Staffing challenges are not limited to public water supply systems, states are also experiencing shortages due to retirements and resignations. Along with the need to hire new full-time employees comes the need to educate them with the appropriate knowledge and skills. It takes approximately a year for a rule manager to become fully conversant in a single drinking water regulation. Given the number and complexity of the new rules mentioned above, states will be stressed to keep up with the workload.

States are generally supportive of the Buy America, Build America (BABA), American Iron and Steel (AIS), and Davis-Bacon congressional requirements contained in the various federal

funding programs. However, small public water supply systems do not have the capacity to ensure all requirements are met. These requirements can delay projects and increase the final cost. In addition, some of the federal requirements contained in 2 CFR 200 (Uniform Grant Guidance) are burdensome for small water systems to comply with and challenging for primacy agencies to track compliance. This impacts the ability of primacy agencies to fully utilize grants for Small, Underserved and Disadvantaged Communities (SUDC) and increases the administrative burden of the Emerging Contaminants for Small and Disadvantaged Communities (EC-SDC) grant. The uniform grant requirements make it challenging to help the small and disadvantaged systems these grants were designed for.

One specific challenge states have experienced during the past 3 years associated with implementation of IIJA is the coordination of technical assistance with EPA. EPA has historically contracted with approximately three to four 3rd party technical assistance providers. These TA providers are required to coordinate with primacy agencies on the assistance provided directly to public water supply systems. This coordination has worked well in the past. With the passage of IIJA, EPA established a more robust direct TA program that includes 3 National and 22 Regional TA providers with the intended purpose of helping small and disadvantaged drinking water systems gain access to the SRF program. While EPA tries to coordinate with primacy agencies on the activities of the SRF TA providers, there is sometimes a disconnect between the primacy agencies and the TA providers. The SRF TA providers are often located outside of the state in which assistance is being provided and they are unfamiliar with state specific requirements and processes. Enhanced coordination among EPA, state primacy agencies and the TA providers is needed.

One final challenge states and public water supply systems face is the cybersecurity threat to public water supply systems across the nation, often associated with international bad actors. This emerging threat to the safety of water produced by public water supply systems is a growing problem that needs immediate attention. States and water systems do not currently have the technical skill set or financial resources to address cybersecurity in a comprehensive manner. Additional, dedicated funding and technical support is needed to ensure states and public water supply systems are implementing sound cybersecurity hygiene practices.

The Path Forward for the Safe Drinking Water Act

Although the challenges are many, with improved collaboration between EPA and states combined with enhanced support from Congress we can collectively continue to protect the Nation's drinking water. States and public water supply systems with support from EPA and Congress have made great strides during the past 50 years to protect public health through implementation of the SDWA. Through the actions suggested below, the achievements of SDWA over the past 50 years can continue for the next 50.

Actions that can be taken by Congress to relieve the burden on states and public water supply systems include:

- Provide nationwide waivers for compliance with Build America, Buy America (BABA), American Iron and Steel (AIS), and Davis-Bacon requirements for public water supply systems serving populations less than 10,000.
- Fully fund the base SRF capitalization grants.
- Fund Congressionally Directed spending from a source other than the SRF capitalization grant.
- Increase the annual PWSS grant appropriation from $112,000,000 to $200,000,000.

State primacy agencies and EPA generally work well together under the Cooperative Federalism framework. Recent increased oversight of primacy agency enforcement programs has created some confusion and misunderstanding of the respective roles EPA and states play. Continued dialogue between EPA and primacy agencies is critical to resolving the challenges related to enforcement activities to move forward in a productive manner. It is also important that EPA engage states as co-regulators early and often in any rule making process. A good example of successful engagement is the development of the PFAS regulation. In the final rule, EPA included several recommendations primacy agencies provided in comments on the proposed rule. A problematic example is the approach EPA employed to try and include cybersecurity assessments during a public water supply sanitary survey. In this example, EPA ignored the concerns raised by primacy agencies and moved forward with an interpretative memorandum as a rulemaking. EPA eventually withdrew this rule due to a lawsuit filed by three states. Moving forward, state primacy agencies as co-regulators stand ready and willing to collaborate with EPA in the rulemaking process or when challenges arise related to SDWA implementation. Through a collaborative effort, EPA and states can help public water supply systems ensure the nation's drinking water continues to protect public health.

Conclusion

In closing, ASDWA and its members are working hard every day to ensure the provisions of the SDWA are implemented in the most effective and efficient manner possible. On behalf of ASDWA's members, I want to thank you for your continued investment in America's public water supply systems and the people they serve. I would be happy to answer any questions you may have and thank you for inviting me to speak today.