



June 19, 2017

Ms. Elena Brennan
Legislative Clerk
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

Dear Ms. Brennan:

As requested, please find below my responses, as President-Elect of the Association of State Drinking Water Administrators (ASDWA), to questions posed by Chairman Shimkus and Mrs. Dingell in your letter of June 9, 2017. The questions relate to my testimony before the Subcommittee on Environment during the May 19 hearing titled "HR ____, Drinking Water System Improvement Act and Related Issues of Funding, Management, and Compliance Assistance under the Safe Drinking Water Act."

Please express our appreciation to Chairman Shimkus and the Subcommittee for the opportunity to testify and provide additional information.

From The Honorable John Shimkus

1. There has been some discussion about the role of using asset management as a criteria when disbursing SRF loans. In Section 1452(a)(3)(A), there is a requirement prohibiting funding for a public water system which does not have "the technical, managerial, and financial capacity to ensure compliance."

- A. What role does asset management play in compliance with this requirement of law and of SDWA section 1420?**
- B. What role does review of a utility's rates play?**

(1A) When designing the 1996 SDWA Amendments, Congress recognized that many drinking water utilities – and especially the smaller systems – did not have all of the elements necessary to attain and sustain their abilities to meet Federal compliance requirements. While creation of the DWSRF provided the financial wherewithal for many water utilities to achieve and maintain compliance with national primary drinking water regulations, it by no means was a silver bullet. To enhance the success of both the DWSRF and public health protection, Congress created the capacity development program (SDWA §1420) that allows states to work with struggling systems to help them achieve technical, managerial, and financial capabilities to meet Federal drinking water requirements. In the early years, states focused most of their efforts on supporting systems' technical needs – how to take samples, maintain a monitoring schedule, pass a

sanitary survey. As systems gained confidence in their abilities to achieve operational proficiency, states began to look more closely at small system managerial and financial capabilities.

One of the tools that has been very helpful in educating drinking water utilities on how to attain and maintain their systems has been the development of asset management programs. For more than 10 years, under the auspices of capacity development strategies, states have been working directly and through their contracted assistance providers to educate smaller systems about the concepts and application of asset management principles as a road to successful public health protection. Many small systems are intimidated by the process and require direct, one-on-one training and support. EPA's university-based environmental finance centers have developed numerous webinars and support resources for asset management and the Agency's Office of Ground Water and Drinking Water has continued to update and improve its asset management tool (Check Up Program for Small Systems). Other, larger systems have taken advantage of the AWWA asset management tool.

Successfully gaining the confidence of small drinking water systems to undertake and sustain an asset management program is a long term effort. In the early days, many of these systems did not have a basic business plan and kept their financial records in a shoebox. Educating them on the value of instituting asset management, explaining the process, and having these systems follow through is not something that happens easily or quickly. The Capacity Development program as outlined in SDWA §1420 is an invaluable resource in helping smaller drinking water systems take on asset management which, in turn, enhances their eligibility for a DWSRF loan.

(1B) Reviewing utility rates is an activity not traditionally undertaken by state drinking water programs. Rate reviews, rate structures, and rate changes are generally managed by state Public Utilities Commissions or Public Service Commissions. Most states do not engage in local decisionmaking when it comes to rates. State drinking water programs do, however, provide outreach and education to community water systems about the different types of rate structures, the value of choosing the right rate structure, and the resources available to help a system make those determinations. States also work with smaller systems to understand asset management and how rates may affect the ability of the system to operate effectively and efficiently.

2. As you mentioned in your testimony, from 1996 to 2013, the national compliance percentage with health-based standards for water systems has increased from 85% to 93%. A lot of times in Congress we only hear about the nation's problems, so it is nice to hear this positive statistic and we of course want to see that compliance percentage continue to rise.

A. What other positive trends or success stories are happening with our nation's drinking water infrastructure?

B. This statistic on improved water quality compliance seems to be contrary to the fact that our nation's water infrastructure is in dire need of repair and investment.. How do you explain the discrepancy?

(2A) In general, the overall number of public water systems in the US has declined by nearly 20,000 since 1996 (170,942 v. 151,137). This is a good news story because it reflects the thoughtful consideration of many former systems as they learned about their responsibilities. Many did not even know that they had water system responsibilities. Nearly 4,100 of the reduced system number applies to community water systems...those that serve year-round populations of more than 25 people. These systems, for the most part, declined to continue as a drinking water system and were absorbed into a neighboring community system, joined forces with co-located systems to create a larger operational unit, or, in the more remote areas, simply dissolved and returned to private wells. These restructuring efforts have reduced the number of unsustainable (struggling?) systems and served to enhance our public health protection abilities as reflected in the compliance numbers referenced in the question.

Similarly, through the capacity development and operator certification elements of the 1996 SDWA, concerted education and outreach to small drinking water systems and their operators has resulted in better performing systems, better trained and educated operators, and a greater understanding of the 'why' behind many of the new rules and regulatory requirements. Source water protection efforts are another non-regulatory element in water system successes. Simply knowing your water source and taking simple steps toward prevention provide a significant reduction in the costs to remove known contaminants from the water supply and diminishes the downstream impacts of wastewater treatment. Finally, since the first infusion of \$358.6 million in Federal funds (FY 97), the DWSRF has funded more than 13,000 projects for drinking water systems across the nation. Because of the availability of these funds, many of the repairs and upgrades needed to maintain system integrity were implemented and water quality and quantity problems were resolved. Cumulatively, between FY 97 and FY 16, the Federal investment in the DWSRF has been nearly \$18.4 billion and states have contributed an additional \$3.45 billion. In addition, many states have leveraged the core funds to provide even more money for loans to drinking water systems.

(2B) There are really two components to our response to this question. While everyone agrees that the DWSRF has been successful and provides critically needed funding to meet the infrastructure needs of the drinking water utilities across the Nation, not all public health and compliance problems are rooted in physical infrastructure. The 1996 Amendments to the SDWA offered opportunities to delineate, assess, and protect source waters; to train and educate water system operators; to help struggling systems understand their managerial and financial responsibilities; to implement new rules that offer greater public health protection; and to communicate more effectively and efficiently with the public about the quality of the water they drink. Each of these factors contribute to improved public health protection and greater compliance, yet are not directly connected to aging infrastructure.

Separately, the referenced health based statistics do not always reflect the breadth of problems found at a water system. Problems caused by aging or inadequate infrastructure often show up as significant deficiencies during sanitary surveys, where the deficiencies can be identified and addressed through the find-and-fix provisions of the RTCR, GWR, and SWTRs. In addition, aging/inadequate infrastructure often results in the complete failure of a piece of equipment or a facility, such as a breakdown in chemical feed equipment or pumps, or a failure of water mains, pipes, valves or other appurtenances. And these failures often lead to dire consequences such as water outages, boil water advisories, or “do not consume” or “do not use” notices. Here are a few recent examples from Pennsylvania:

On December 1, 2016, the Carlisle Borough Municipal Authority experienced a catastrophic failure of their water filtration plant due to an equipment failure. A check valve failed on the discharge side of a high service pump, and allowed the water from two large finished water storage tanks to flow downhill back into the filter plant at an estimated rate of more than 4,000 gallons per minute; causing the clearwell to overflow and flood the below-ground pipe gallery. Multiple pieces of equipment were submerged and destroyed or rendered non-functional, including raw water pumps and motors, high service pumps and motors, water quality monitoring equipment, and some of the chemical feed equipment. The filter plant was rendered inoperable, and Carlisle was forced to implement mandatory water use restrictions and utilize several permanent and temporary emergency interconnections with adjacent water suppliers. The mandatory restrictions were in place until December 7, when Carlisle was finally able to complete repairs and/or replacements and resume production.

Since early 2016 and continuing into 2017, the Pittsburgh Water and Sewer Authority has been cited for multiple violations and deficiencies, several of which are the direct result of aging/inadequate infrastructure. These situations have included breakdowns in chemical feed equipment, failure of a rising main, treatment efficacy issues at a membrane filtration plant, problems with several pump stations, and concerns about the integrity of their clearwell. And while these violations have not resulted in MCL exceedances, they have most definitely resulted in multiple field orders, necessary emergency corrective actions, and several boil water advisories. Work at this system is ongoing to bring them back into compliance and ensure public health protection.

In summary, the improved compliance rates, while not always tied directly to aging infrastructure, do not counter the need for infrastructure funding; rather, taken together compliance rates will continue to improve as infrastructure needs are met.

From The Honorable Debbie Dingell

3. Ms. Daniels, in Pennsylvania, how is your department working to improve communication and notification of water quality with the public?

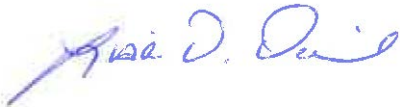
While there is always room for improvement, Pennsylvania has worked hard over the years to ensure access to water quality information and improve transparency. Since

2002, all public water system compliance sample results have been publicly available on our website through the Drinking Water Reporting System available at <http://www.drinkingwater.state.pa.us/dwrs/HTM/Welcome.html> . And since 2009, Pennsylvania has required mandatory electronic reporting of compliance data to ensure data integrity. All data that is submitted undergoes multiple QA/QC batch edit checks, and is then run through automated compliance programs to determine MCL compliance. The public can access sample results, inventory information and violation data for all 8,500+ public water systems in the state. PA is also working on enhancements to our Department-wide enterprise system – eFACTS – to provide better access to inspection results and permitting data.

Regarding notification of water quality problems, Pennsylvania enacted more stringent public notification requirements in 2009 to improve the delivery and effectiveness of public notice for our most serious violations – Tier 1 violations. Pennsylvania also has a long-standing requirement that water suppliers must notify the Department within one hour of becoming aware of a violation or situation with the potential for adverse impacts on water quality or quantity. This allows us to immediately consult with the water supplier about the situation, and make very quick decisions about actions that may be needed to protect public health.

Areas for improvement include transitioning to electronic inspections and electronic permitting. This would allow us to make information more readily available and accessible. State resources have been a challenge to making this a reality

Sincerely,



Lisa D. Daniels
ASDWA President-Elect and
Director, Bureau of Safe Drinking Water
Pennsylvania Department of Environmental Protection