American Water Works Association
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The Honorable John Shimkus
Chair
Subcommittee on Environment and the Economy

The Honorable Joseph R. Pitts
Chair
Subcommittee on Health

U.S. House of Representatives
Washington, DC 201515

Dear Representatives Shimkus and Pitts,

Below are the follow-up questions to the April 13 hearing on the Flint water crisis and our responses to thos questions. We apologize for the lateness of these responses. I do appreciate the opportunity to provide my field experiences in dealing with lead in drinking water issues on behalf of my utility and the American Water Works Association. Below are the questions from specified members and my responses:

Questions from the Hon. Morgan Griffith

1. *How will customer-initiated sampling that includes any home, even at low or no risk for lead in water, achieve the intent of the LCR's monitoring requirement, which is assessment of CCT effectiveness through monitoring lead-in-water levels at a small number of highest risk homes?*

The NDWAC recommendation to emphasize customer-centered sampling focused on providing data which could be used for multiple purposes. It is designed to be implemented in conjunction with more intensive outreach to homes with lead service lines (LSL). The data would be used to inform and empower customers to take actions to reduce their lead exposure, to evaluate the performance of CCT, and in conjunction with the recommended household action level, to provide data to local health officials when a specific home had elevated lead levels.

Under the current LCR, many systems are under reduced monitoring (because their LCR results have been consistently below the lead action Level) and sample during a four-month period every three years. Those samples must be at the same homes previously sampled. No regulatory samples are collected during the other 32 months of that three-year period, and the current rule construct and interpretation discourages customer or investigatory sampling. The NDWAC recommendation encourages and allows sampling throughout the distribution system, particularly focused on homes with LSL, and throughout the year. The NDWAC working group believes that this would provide superior coverage to the current sampling program.

Section 3.4.2 of the NDWAC report provides a more detailed discussion of the potential benefits of the monitoring recommendations.

2. *How would sampling using the strategy recommended by the NDWAC have been able to identify the DC or the Flint water crisis any sooner than current LCR sampling?*

   It is possible that a program which encouraged more sampling and looked at all the data might have picked up the changes in Flint sooner.

3. *Should the revised LCR include a ban on partial lead service line replacements?*

   The NDWAC recommendations strongly discourage and provide no regulatory benefit for partial replacements. They require substantial public education around the risks of having any portion of a LSL in place, and in particular the risks of a partial replacement, and require information about risk mitigation methods.

   The recommendations do recognize that some partial replacements may still occur, and require more aggressive efforts to inform the residents of the risk and provide risk mitigation. The NDWAC working group recognizes that there may be practical real-world situations where a partial LSL replacement may occur, such as in a water main replacement project where the LSL will be disturbed in any case due to the construction, and where a homeowner refuses to allow work on his or her property. In such cases, removal of the portion of the LSL in the public way, proactive outreach and providing comprehensive information about the risks to the property owner and customer and collaboration with public health agencies are the most appropriate actions.

   Section 3.1 of the NDWAC report discusses the importance of full LSL replacement and the limited circumstances and conditions under which a partial replacement might be permissible.

4. *Is public health protected when water systems perform partial lead service line replacements?*

   A full LSL replacement is always best. The NDWAC report recommends that the revised LCR provide strong encouragement for full LSL replacements, with the understanding that there may be limited justifiable exceptions and that those exceptions would occur only after the

recommended required efforts on the part of the PWS to work with customers to complete a full LSL replacement. Revisions to the LCR should include options for risk management to occupants of those properties with remaining, partial lead service lines, e.g. additional sampling, filters, dielectrics to reduce the risk of galvanic corrosion, plastic piping, aggressive premise flushing, etc.

5. *Under the proactive lead service line replacement program recommended by the NDWAC, what measures can be used to ensure that actual replacements are mandatory?*

   The NDWAC recommendations require that all water systems with LSL actively work toward full replacement of all LSL. Given the variability and complexities of each local situation and state laws, and the strong desire that full replacements occur, the NDWAC did not assume that every property owner would be immediately agreeable to replacement of the portion of the LSL on his or her private property. Therefore, the recommendations call for continued efforts, with escalation of those efforts over time to eventually convince every property owner to participate. The water system is required to continue until every LSL is fully replaced.

Questions from the Hon. Paul Tonka

1. *Are state or the federal government providing sufficient resources and technical support to enable drinking water utilities to put together accurate inventories and develop asset management plans to help them evaluate and proceed with a good infrastructure repair and replacement program?*

   No. The NDWAC report provides a number of recommendations for additional support both from traditional sources of drinking water funding, as well as other state and federal programs. Success at reducing lead exposure will require additional resources over many years.

2. *The Massachusetts Water Resources Authority has some valuable experience in identifying and replacing lead service lines. But, as you know there are multiple challenges for cities like Flint to implement a program where the ratepayer assumes a portion of these costs. What support can be given to low-income homeowners to replace privately owned portions of lines?*

   The NDWAC report recognizes that economic justice issues were key to success. The report suggests use of other federal programs such as the HUD Healthy Homes program or Community Development Block Grant funds as potential sources of additional targeted resources.

3. *My understanding is that many cities do not have accurate inventories of the physical infrastructure in their systems, let alone accurate records of where the lead is in their systems. Is this accurate for many systems around the country?*

   The completeness and accuracy of service line inventories varies substantially from system to system. The NDWAC report recognizes this in the structure of its recommendations around LSL replacement, calling for parallel efforts to improve inventories and make them more publicly

available, while informing homes with LSL of the risks and beginning to fully remove LSL where they were known to exist. Replacement should not wait until a perfect inventory is available, it can begin immediately.

4. *Do you believe creating an inventory of lead service lines is critical for running an efficient replacement program and improving public education?*

   Yes, but replacement and education need not wait for the complete inventory.

5. *What incentives need to exist to get more systems to develop and update inventories of infrastructure?*

   The NDWAC recommendations focus on creating incentives to improve inventories by requiring that water systems assume that areas and buildings where LSL were likely to exist did have them until such time as the inventory assessment could reasonably demonstrate otherwise. Thus outreach efforts would be required to focus on that wider universe, and annual targets for replacement would be based on that larger number until the inventory was improved. Section 3.1.1 of the NDWAC report provides additional detail on how this incentive would work.

6. *Many systems have not transitioned into the digital age. What has Boston done to provide more information to homeowners and what resources were necessary to get your map tool started?*

   The availability of community web sites and mapping tools is rapidly increasing. Larger communities are likely to have access to more sophisticated Geographic Information System data and tools. However, with relatively simple tools such as Google Map and databases, any community can provide easy access to data on LSL – if they have the inventory.

7. *Do most utilities implement an asset management plan? Do small and distressed systems have the resources and technical expertise necessary to do so?*

   Formal asset management plans exist more typically in larger systems, but some smaller systems have more basic versions. Even in those systems with some type of plan, in many cases, available financial resources do not permit fully funding all the required work. The NDWAC commented on the fact that the LSL replacement recommendations would be adding additional financial burden, and suggested that EPA and other federal agencies would need to assist in bring more resources to bear on the issue.

8. *Generally, is lead service line replacement part of existing asset management plant?*

   Many water systems have been replacing at least the portion of the LSL in the public way as part of their pipeline replacement or street improvement programs. Going forward, it is likely that full LSL replacement will accompany such projects. Some water systems have included LSL replacement programs as specific items in their capital improvement programs or routine maintenance programs. The NDWAC recommendations will likely increase the number who do so.

9. *Can you explain the challenges for lead line replacement in cities that have reduced populations or numerous abandoned properties, resulting in service lines that are not in regular use? Would leaving those lines in place present any risk to the systems should corrosion control cease in the future?*

   Lead service lines serving abandoned properties should be replaced before the properties are re-occupied. Any lead service line represents an increased risk of elevated lead levels should corrosion control treatment be disrupted.

Question from the Hon. Lois Capps

1. *Flint has shown us that we must invest in our nation's future by supporting our infrastructure as well as our preparedness moving forward. What mechanisms and collaborative efforts can be put in place moving forward to ensure that we do not see a repeat of the crisis we experienced in Flint in another community?*

   Sustainable infrastructure begins at home. Communities need to have sufficient technical, managerial and financial (TMF) capacity to adequately plan, build and maintain infrastructure for the citizens and businesses they serve. Local water rates and fees are the backbone of capital investment in water infrastructure. However, communities that lack TMF capacity will not be able to reliably fund and manage the infrastructure under their domain regardless of federal assistance or regulatory frameworks. Federal collaboration and support for programs helping water systems become more sustainable is valuable and appreciated.

   There is a role for federal investment in water infrastructure. As you know, the drinking water and Clean Water state revolving loan funds provide federal and state roles in helping water systems achieve regulatory compliance at rates or conditions helpful to small or distressed communities. We feel there are administrative changes that could make the SRFs more effective. For example, we have heard that while some states have more projects applying for SRF funds than they can support, other states are sizable funds that are not used. In some states, the cost and time required to apply for an SRF loan drives water systems to USDA's Rural Development programs or the municipal bond market instead of the SRF. The drinking water SRF is not authorized to fund projects addressing population growth. AWWA has begun developing recommendations for improving the SRF which we would be happy to share with the committee once completed.

   SRF funding is not typically available to support extensive distribution system rehabilitation, such as that needed in Flint – there simply is not enough available funds for all critical public health needs and investment in infrastructure renewal. Providing funding for the new Water Infrastructure Finance and Innovation Act (WIFIA) to begin making loans would greatly expand the pool of funds available to assist water systems for projects beyond the size or authorized scope of the SRF. Appropriations are needed to launch WIFIA's actual loan-making capabilities.

Place-based problem solving is needed in communities seeking to solve particularly intransigent infrastructure challenges. As community-driven problem-solving efforts are undertaken, those participating must be open to considering regionalization, public-private partnerships or public-public partnerships. State and federal support for infrastructure finance, enforcement policies, and educational efforts can help communities evaluate these options.

At the local level, tough decisions regarding water rates, utility organizational structures and significant treatment changes do require customer buy-in. To that end, federal and state government needs to more clearly articulate the value of water service, clearly communicate relative risks associated with contaminants in drinking water, and bring available federal programs to bear to help economically challenged households afford water service. Flint illustrates that the lack of a cohesive multi-media, multi-agency federal communication plan for managing lead risk can result in a lack of appreciation of potential risks and ultimately the loss of community trust. Federal measures that build a cohesive support network on key topics can provide a credible backstop for state and local efforts to build community support for local actions.

Again, I appreciate the opportunity to provide input to your subcommittees. Please feel free to contact me or staff in the government affairs office of the American Water Works Association if you would like to discuss these issues further.

Sincerely,

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