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Docket ID: EPA-HQ-OW-2022-0801
Proposed Rule: National Primary Drinking Water Regulations for Lead and Copper:
Improvements (LCRI)

The American Society of Civil Engineers (ASCE) is pleased to provide comment to the U.S. Environmental Protection Agency (EPA) on its proposed improvements to the National Primary Drinking Water Regulations for Lead and Copper (Lead and Copper Rule). These proposed improvements were formulated in accordance with the Safe Drinking Water Act.

Background

Founded in 1852, ASCE is the nation’s oldest civil engineering organization. ASCE represents more than 150,000 civil engineers in private practice, government, industry, and academia. It is ASCE’s objective to advance the science and profession of engineering to enhance the welfare of humanity. ASCE members are actively involved in the planning, design, and operation of drinking water systems nationwide, and are dedicated to ensuring that systems are able to provide a safe and reliable supply of drinking water to homes and businesses.

ASCE recognizes the critical importance of safe drinking water to public health, safety, and welfare. To better ensure this, ASCE Policy Statement 361, “Safe Drinking Water”, recommends:

- Full appropriation of state and federal authorized funding for safe drinking water supply and system programs;
- Congress amend the Safe Drinking Water Act to require states to review and update, as required, their contaminant-monitoring programs at least once every three years to ensure that all potential contaminants are periodically evaluated commensurate with their risk to human health;
- Regulations be promulgated under the 1996 amendments to the Act, to balance the concern for drinking water quality with risk-based contaminant limitations that include adverse health effects, frequency of occurrence, and treatment technologies to avoid undue financial burdens on consumers;
- Utilities are encouraged to conduct revenue forecasting models to determine the necessary rate revenues that reflect the true cost of water;

- Congress, through the Environmental Protection Agency (EPA), to support state programs by providing federal funding, program planning assistance, and technical guidance with sufficient flexibility to accommodate state and local issues, including the development and funding of affordability programs;
- Continued research on emerging pathogens and pollutants and into improved methods governing the disinfection of drinking water to protect public health from any harmful byproducts;
- The professional education, research, and development necessary to formulate new methods of water quality analysis, water treatment, and related technologies be pursued; and
- Specific programs and funding for water quality improvements for removal of lead in water systems prioritizing lead line, service line, and/or plumbing removal or replacement, targeting systems with the highest concentration exceedances of lead and copper be implemented as soon as possible.

Lead Service Line Replacement

The 7th Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) provided an inventory of the nation's lead service lines for the first time in the survey's history. EPA projected a total of 9,223,745,000 lead service lines nationwide. These findings are not surprising given that many U.S. cities rely on water supply infrastructure installed more than 100 years ago, when lead was common in pipes and fixtures. When health risks associated with lead exposure became more widely known in the mid to late 20th century, efforts were made at all levels of government to address challenges and threats to public health and safety. This included EPA's first Lead and Copper Rule, enacted in 1991, which restricted lead levels in drinking water supplies. Drinking water utilities also began to more routinely utilize additives to prevent pipe corrosion.

In recent years, a few communities have undertaken initiatives to remove lead service lines. These programs, however, are costly and compete for other drinking limited capital investment dollars with other drinking water utility needs. The increased expense to deliver safe drinking water, combined with the high cost of addressing lead contamination has often resulted in unsafe lead levels in drinking water in many communities. In the past, the costs of replacing lead service lines have been affected by lack of adequate funding to support such efforts. The lead service line removal proposal outlined in the proposed Lead and Copper Rule improvement is also likely to prove very costly.

The proposed Lead and Copper Rule improvements include an ambitious plan to remove all lead service lines within 10 years. As previously noted in ASCE Policy Statement 361, ASCE supports specific water quality improvement programs which prioritize lead service line replacement. EPA should make every effort to ensure such an undertaking includes rigorous community engagement to ensure that service lines which connect private homes and businesses to public water systems are addressed without placing excessive burden on utility ratepayers, especially those in disadvantaged communities. This may include providing proper incentives such as grants and tax credits to address the costs of service line removal. Research has shown that when customers are relied on to pay for lead pipe replacement, low-income households are

put at greater risk of lead exposure as they are less likely to be able to take on the cost of replacing lead service lines on their property.¹ EPA should make every effort to ensure that the most vulnerable populations that could potentially benefit the most from such an ambitious proposal are not disproportionately affected by the cost of such an endeavor.

In addition, it is also critical for EPA to effectively plan removal efforts based on risk. While it is essential to ensure that the cost of replacement does not fall disproportionately on disadvantaged communities, it is also necessary to prioritize removal of service lines that pose the greatest lead contamination risk. This will have the effect of addressing a long-term challenge while preventing potential health crises in the short term in areas served by water systems using older pipes which are leaching lead at higher levels.

While IJJA made a significant investment in lead service line replacement, the proposed undertaking will require significant additional resources at the federal, state, and local level to meet the cost of replacing lead service lines and reducing financial burdens on customers. The cost of service line removal has been estimated to be as high as \$10,000 per line.² In 2021, the Infrastructure Investment and Jobs Act (IIJA) provided a historic investment of more than \$50 billion to address water infrastructure challenges. This included \$15 billion through the Drinking Water State Revolving Fund (DWSRF) program to address lead service line replacement. While this marks a historic investment in lead service line removal, it is far short of the nearly \$93 billion which will be required to remove all lead service lines inventoried in DWINSAs. In addition, annual appropriations for the DWSRF and other infrastructure financing programs have remained flat or seen funding reductions, meaning they have not kept up with funding levels in IIJA.

To address challenges to drinking water systems nationwide, ASCE recommends that annual funding levels for financing programs such as the DWSRF be program be funded at a level at least three times greater than is currently in place. It is also critical to ensure that other financing programs like the Water Infrastructure Finance and Innovation Act and the U.S. Department of Agriculture Rural Development Program are fully funded.³

As noted earlier, the 7th DWINSAs which was released by EPA in 2023 provided for the first time a projected inventory of lead service lines nationwide. EPA must continue to ensure that DWINSAs is delivered on schedule every four years, and that it adequately marks progress in reducing the presence of lead service lines. This will not only inform policy makers of the effectiveness of removal efforts, but also direct where federal funds should be best allocated to improve the efficiency and speed of removal.

¹ *Lead Pipes and Environmental Justice: A Study of Lead Pipe Replacement in Washington, DC*, Environmental Defense Fund; American University School of Public Affairs, March 2020.

https://www.edf.org/sites/default/files/u4296/LeadPipe_EnvironJustice_AU%20and%20EDF%20Report.pdf

² American Water Works Association, *Considerations when Costing Lead Service Line Identification and Replacement: Final Report*, November 2022.

<https://www.awwa.org/Portals/0/AWWA/ETS/Resources/Technical%20Reports/2022%2011%2029%20072%20CDM%20SLR%20Identification%20and%20LSLR%20Costs.pdf>

³ *Drinking Water, 2021 ASCE Report Card for America's Infrastructure*, <https://infrastructurereportcard.org/wp-content/uploads/2017/01/Drinking-Water-2021.pdf>

Strengthening Lead Level Protections

The proposed Lead and Copper Rule improvements includes a proposal to lower the lead action level from 15 parts per billion to 10 parts per billion. Water systems would be required to notify the public when their lead sampling exceeds this action level, followed by action to reduce lead exposure while replacing lead service lines. Systems which exceed the new action level multiple times would be required to conduct additional outreach and make lead filters available to customers. Robust public engagement of the risks of lead exposure is necessary for protecting public health and safety and will be critical to the success of the proposed improvements. EPA must also ensure that adequate technical assistance is available to communities in order to support effective testing and monitoring of lead levels to avoid multiple incidents exceeding the action level.

Conclusion

ASCE thanks EPA for the opportunity to provide comment on this critical public safety proposal. Addressing lead contamination and maintaining safe drinking water systems is a difficult and complex challenge. EPA has put forward an ambitious proposal to address these challenges, proper implementation of which will be critical to ensuring its success. We hope EPA will give proper consideration to the views and recommendations put forward by ASCE on this issue.

Should you have any further questions or require any further input, we encourage you to contact Matthew McGinn, ASCE Senior Manager for Government Relations at mmcginn@asce.org, or at (202) 789-7852.