



**American Water Works  
Association**

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## **Proposed Revisions to the Federal Lead and Copper Rule for Drinking Water**

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The members of the American Water Works Association (AWWA) appreciate the opportunity to provide our perspectives for today's hearing on the proposed revisions to the federal Lead and Copper Rule (LCR) in the interest of advancing public health protection. Lead exposure is unquestionably one of the most significant and challenging environmental issues the country faces, whether that exposure be through water, paint, dust or other media. AWWA's board adopted a statement of public policy more than three years ago calling for the removal of all lead service lines, a primary source of lead in drinking water.

There is good news to report. The U.S. Environmental Protection Agency (EPA) first promulgated the Lead and Copper Rule in 1991. Within ten years the number of large systems exceeding the action level for lead, 15 microgram per liter, dropped 90 percent. This reduction reflects the success of effective corrosion control treatment. Corrosion control reduces the release of lead into drinking water from lead service lines, home plumbing and fixtures where lead is present. The LCR's success builds on previous and ongoing efforts to eliminate the use

of lead in plumbing. Notably, Congress banned the use of lead pipe and lead solder in 1986, and then in 2012, further tightened the allowable level of lead in brasses and other materials that come in contact with drinking water.

The reduction of lead exposure through all media, water, air, dust, and soil have contributed to a substantial reduction in blood lead levels, including blood lead levels of young children. As summarized in the 2016 EPA Lead and Copper Rule Revision White Paper, "...from 1976 – 1980 the median blood lead level of a child (1-5 years old) was 15 micrograms per deciliter. That median level has been reduced dramatically since then, to 1 microgram per deciliter, based on the most recent data. Further, over the last twenty-five years, the percentage of children aged 1–5 years with blood lead levels less than or equal to 5 micrograms per deciliter declined more than ten-fold, and blood lead levels fell dramatically for all racial and ethnic groups."

My system, the Massachusetts Water Resources Authority, is the wholesale water and sewer provider to 3 million people in 61 cities and towns in the Boston metropolitan area. Lead has been a significant focus of our public health efforts since the early 1990s. We installed modern corrosion control treatment and saw lead levels in high-risk homes drop by about 90 percent. We have ongoing collaborative outreach and education efforts with our public health partners to provide our customers with the information they need to take action on lead risks. To remove obstacles that may make it difficult for our communities to replace lead service lines, four years ago, we created a \$100-million, zero-interest loan program. And over the past four years, we have provided free laboratory services to test 38,000 samples from 478 schools and childcare facilities in 43 communities. We believe that managing lead in water is a shared responsibility; we're doing our best to carry our part of the load.

AWWA appreciates the challenges EPA faces in developing a rule that is implementable and that addresses the many perspectives brought to the rulemaking process.

AWWA has submitted formal comments on the LCR to EPA with the objective of helping to develop a rule that does the following:

1. Is indeed implementable in the field;
2. Supports proactive water system choices that accelerate lead service line replacement and maintain effective corrosion control;
3. Promotes the ongoing development of affordable and effective technical solutions; and
4. Is understandable and clear to all people who are affected by lead in drinking water and who must be involved in moving toward a lead-free future

We would like to share with the committee additional thoughts on the proposed rule. Shared responsibility is central to reducing the health risks from lead across every media, but is particularly important with developing policies to manage lead in drinking water. Reduction of lead in drinking water requires a collaborative effort by the water system, customers, consumers, manufacturers, state regulators, federal agencies, financing authorities, plumbers, code officials, local government and many others.

In setting out the proposed rule, EPA did not describe any significant new efforts by the agency or Safe Drinking Water Act primacy agencies, or other federal agencies to support the proposed framework, so that water systems subject to the rule would be empowered to be successful.

EPA and state primacy agencies should allocate time, effort and resources to activities to assist water systems as they undertake the actions envisioned in the proposal, and to make information on lead available to everyone with consideration of educational level, socio-economic status, and responsibility for managing lead.

AWWA recommended that EPA focus on refining the regulatory text to address the following and that the final rule preamble provide supporting commentary on these issues:

1. **Inventory.** Development of an inventory of lead service lines is a critical first requirement of the proposal. The agency should continue to emphasize that the lead service line inventory is to be based on available information and improved over time in the course of routine system activities. The rule must recognize that there is going to be uncertainty in which pipe materials are present, but make clear that water systems should be transparent about the basis for the inventory when presenting it to the public.

AWWA strongly supports development of these inventories. That said, the proposed rule provisions will create unnecessary customer concern and distrust if the required methodology artificially inflates the number of “unknown material” service lines and those lines must be treated as though they are made of lead. Artificially high numbers of lead service lines of concern misdirect limited resources and disincentivize water systems.

2. **Clarity.** The proposed rule preamble and the proposed rule text are often inconsistent. EPA’s description of the proposed rule requirements in the preamble – and in public statements – are often a more cogent articulation of expectations for water systems than the rule text. A lack of consistency will lead to confusion. Moreover, due to this ambiguity, the rule text repeatedly leaves open the possibility that water systems, despite significant efforts toward complying with the rule’s substance and intent, would be subject to the caprices of state or regional EPA administrators. This is especially true with respect to the early implementation requirements related to the development of lead service line inventories.

3. **Corrosion control.** The required steps in the proposed rule for evaluating corrosion control in the current proposal does not provide any flexibility to water systems seeking to balance multiple water quality issues, operational constraints and environmental factors. It unnecessarily prevents EPA, state primacy officials and water systems from using the best available science. The rule attempts to apply a

one-size-fits-all approach to corrosion control evaluation when experience and science has shown the need for site-specific decisions about the best evaluation technique. This is even more concerning given the very prescriptive ways and timeframes in which the corrosion control treatment studies must be conducted. AWWA strongly encourages EPA to revisit its requirements for corrosion control in the proposal and incorporate a toolbox approach to evaluating corrosion control that clearly articulates criteria for balancing objectives and constraints in selecting appropriate lead corrosion control strategies that will actually and reliably provide the desired reductions in lead levels without increasing risks.

4. **WIIN Act Implementation.** Providing community-wide Tier 1 public notice based on a 90<sup>th</sup>-percentile concentration greater than 15 µg/L is inconsistent with Congress's instruction to provide such notice to the public after a lead level exceedance "that has the potential to have serious adverse effects on human health as a result of short-term exposure." If EPA is unable to determine such a health-based level of lead, then the agency must be especially careful to assure that expectations for public notification and the notification language itself are carefully gauged so as to not cause undue public panic. Sample data is based on high-risk homes, not the average for all homes. This is especially true in the initial implementation of the rule where a new definition of the compliance pool may have many water systems exceeding the action level although their water quality and corrosion control have not changed.
5. **Fifth-liter sample.** EPA's proposal appropriately uses the current in-home tap sample protocol for calculation of a system's 90<sup>th</sup>-percentile lead and copper concentrations for comparison to the lead and copper action levels and lead trigger level to evaluate the effectiveness of corrosion control. Fifth-liter sample protocols and other sampling strategies, such as sequential sampling, may be useful for diagnostic evaluations and other purposes rather than in the rule construct to trigger evaluation of the effectiveness of corrosion control. EPA should develop guidance on

fit-for-purpose sampling protocols which water systems and others can use to investigate individual structures, evaluate changes in corrosion control treatment and help homeowners make informed-decisions.

6. **Find-and-Fix.** When required, first-draw tap samples from compliance monitoring are above 15 µg/L, then the water system should engage that household to encourage them to determine which source of lead is contributing to such high values and what remediation options are available to the household. Evaluation of corrosion control practice should not be based on individual high lead values, but should be a part of a trend analysis to inform responses to exceedances, consideration of new sources and treatment changes and long-term measure to improve corrosion control.

The final rule language must recognize that it may not be possible to identify a specific action to take in every instance, and that the primary purpose of this monitoring is to engage the customer in understanding the sources of lead in their home to assist that customer to take action.

7. **Pitcher filters.** Based on EPA's experiences in Flint, Mich., Newark, N.J., and other locales, it is already clear that requirements for partial and full lead service line replacement must be flexible. Additional risk mitigation measures, such as the use of filters, should be situation-specific decisions determined by the system with state oversight.

EPA does not change regulatory language sufficiently frequently to identify just one risk mitigation strategy; regulatory revisions will not keep pace with research, or experience may identify more efficient and effective alternatives. The proposed rule language does not provide sufficient clarity as to the filter performance criteria desired to guide either procurement of filters or selection of alternative risk reduction measures.

8. **Monitoring in schools and childcare facilities.** AWWA states in its comments filed with EPA that the agency should remove the proposed monitoring requirements for lead in schools and childcare facilities. These institutions and businesses have a responsibility to provide a healthy environment for the children in their care. Many states already have regulatory regimes to assure that educational and childcare facilities provide a safe environment for the children. EPA, the Department of Health and Human Services and many state agencies have information on the management of all environmental hazardous at these facilities. These materials guide facilities toward prioritizing and managing risks across multiple media with an emphasis on achieving remediation. If this provision is retained in the LCR revisions, it should be focused on community water systems being prepared to assist schools and child care facilities that are investigating and remediating plumbing to reduce lead in drinking water upon the request of those facilities. In October, EPA announced the renewal of a memorandum of understanding with AWWA and a number of organizations, including other federal agencies, toward this end.

In keeping with the spirit of the Federal Action Plan to Reduce Childhood Lead Exposure, school and child-care testing would be more effective if efforts were spearheaded by the Department of Education or Department of Health and Human Services, which currently work with schools and childcare facilities and have the ability to incentivize such testing as part of a comprehensive effort to reduce the risk of lead.

9. **Timely notification of individual home results.** AWWA agrees that customers that participate in a community water system's compliance monitoring program and that have elevated sample results should receive timely notification of sample results. This is an important provision for which rule requirements should be carefully written to encourage best efforts, rather than discourage water systems from engaging customers in monitoring for lead. Effective risk communication may require more than

24 hours to execute, and standard operating procedures should reflect best efforts for rapid delivery, but recognize that several business days could elapse in some instances.

10. **Documentation.** The standard of care for best-effort compliance with LCR provisions should be achievable by community water systems and not create unreasonable performance expectations or unmanageable levels of documentation for state oversight. With a more complicated rule, reporting and monitoring violations could be very significant and a draw on primacy agency resources while eroding public confidence.

11. **Administratively Sound.** The current proposal should be reviewed for provisions that create infeasible timelines for state and water systems, and such provisions should be revised to eliminate such conflicts. States are charged with overseeing more than 67,500 community water systems in this rulemaking. A rule that is not implementable will be detrimental to public confidence in the nation's drinking water supply.

In our formal comments to EPA on the proposed revisions to the LCR, we note the proposed rule would impose 35 significant, new paperwork requirements. We have suggested ways that EPA may reduce the paperwork burden on water systems and state agencies without impairing EPA's ability to oversee or enforce the lead and copper regulations.

12. **Guidance.** The proposed rule uses a number of technical and administrative terms that cannot be fully defined in the rule, but must be well described for states and water systems to implement the rule. Not only must the final rule be clearer, but AWWA requests that EPA begin to develop guidance for the final LCR immediately and that the guidance be developed in collaboration with stakeholders knowledgeable in the relevant subject matter. The guidance for corrosion control and corrosion control studies is of particular concern at this time.

13. **Trigger Level.** In proposing a trigger level at 10 ug/L in addition to the action level of 15 ug/L, EPA and the Association of State Drinking Water Administrators, on whose comments the bin approach was based, appear to be creating an administrative structure to reduce the workload on states. It is not clear that as written the proposed approach has that effect. It does have two negative effects: (1) creating another “bright-line” value about which risk communication with the public is very challenging and (2) it leads EPA to triggered evaluations of corrosion control practice rather than promoting processes that collect data that can be used to improve corrosion control incrementally over time.

14. **Incentives are Lacking.** Water systems have been moving toward proactive replacement of lead service lines since the recommendations by the National Drinking Water Advisory Council (NDWAC) were finalized. NDWAC placed a great deal of focus on replacing lead service lines as the priority element in revising the LCR. AWWA has agreed and promoted this proactive movement among water systems. Competing requirements in the proposed rule could offset those efforts. Water systems have limited resources. Many are coping with an aging infrastructure. Heavy demands for corrosion control treatment re-evaluations and school/childcare lead programs, for example, will compete with a water system’s proactive programs. The NDWAC discussed the value of incentives. The proposal does not provide incentives to promote proactive action by systems.

This concludes our formal testimony. AWWA and the water community are committed to working toward a day when the potential for lead in drinking water is removed from every household and every community. We look forward to working with Congress, EPA, our members and everyone with an interest in safe water as the new rule is finalized and implemented.

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