February 12, 2020

Mr. David Ross, Assistant Administrator for Water
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460–0001

RE: Comments: Revisions to Lead & Copper National Primary Drinking Water Regulations, Docket No. EPA–HQ–OW-2017-0300

Dear Assistant Administrator Ross:

By way of background, our nonprofit organization, Women for a Healthy Environment (WHE), educates individuals about environmental exposures to public health, provides action steps communities can take to mitigate those risks, and advocates for solutions that create a better tomorrow for all. Through community programming, technical assistance, coalition-building and advocacy, WHE focuses on creating healthy environments in three key areas: homes, schools and early learning centers. Ensuring safe drinking and cooking water in these built environments is crucial to the success and well-being of the people who learn, grow and play in them. Since 2017, we have distributed over 4,000 filters that remove lead in drinking water and delivered workshops focused on lead to residents in the City of Pittsburgh.

We are grateful for the opportunity to comment on the proposed changes to the US Environmental Protection Agency's (EPA) Lead and Copper Rule (LCR) presented on November 13, 2019 in the Federal Register at 84 Fed. Reg. 61,684. After decades of gains in scientific knowledge about the sources and solutions to lead-in-water exposure and programmatic experience under the Rule, an update is long overdue. The proposed revision reflects some of these gains, such as more stringent testing requirements and limiting the circumstances under which partial lead service line replacements occur, but core elements like the action level and the approach to testing fail to consider the breadth of health-based research suggesting a need to overhaul standards, not simply modify them. The Lead and Copper Rule working group of the National Drinking Water Advisory Council (NDWAC), whose recommendations were relied upon heavily, was comprised of persons from water utility companies and regulatory agencies. No experts in corrosion control, the LCR, grassroots lead-in-water work, or health impacts participated as members or consultants of this group.

A health protective LCR is of utmost concern as an organization serving many consumers of the Pittsburgh Water and Sewer Authority (PWSA), a system that tested below the lead action level only twice since early 2016 (when exceedances were first identified). While PWSA dramatically improved its infrastructure and communication strategies per the LCR, it is among many examples demonstrating the reality that it is not prevention-oriented. In 2015 alone, 1,110 water systems serving 3.9 million people exceeded the LCR's lead action level of >15 mg/L[1].

Below is a summary of (1) those changes to the LCR for which we applaud the EPA and (2) our recommendations that build upon and strengthen the LCR revision's ability to protect public health. As a public health focused organization, we are primarily concerned about the following: consistent testing requirements in schools and early learning centers, a health-based action level, aggressive and immediate lead service line replacements, and water systems' risk communication to the public.

Schools and Early Learning Facilities

Since 2017 our organization has assisted over 150 schools and early learning centers to test and remediate for lead in drinking water. Based on this experience, we can confidently recommend creating a federal standard to which these learning environments must adhere in order to eliminate the current confusion associated varying, inconsistent action levels among local and state regulations. An estimated 127,000 schools and 767,000 licensed childcare facilities are not tested under the current LCR. Currently 15 states require lead testing in schools; 11 states require testing in childcare facilities.[2] Pennsylvania is not one of them. As a commonwealth that does not currently require lead testing in schools or childcare centers, we are in full support of the following requirements of water systems:

- Compile a list of schools and licensed childcare centers they serve and verify that list every five years.
- Provide facilities with EPA's 3Ts toolkit.
- Test 20% of schools and licensed childcare constructed prior to 2014 annually (however, priority should be given to those located in environmental justice communities).
- Share sampling results and information about remediation with facilities, as well as local health departments or state health agencies.

We recommend the following changes regarding school and early learning centers:

- Expand the sampling size from 5 water outlets in schools and 2 outlets in childcare facilities to **all** cooking and drinking outlets (per the majority of current state requirements).
- Explicitly require full lead service line replacement (LSLR) in schools and childcare facilities.
- Require schools and childcare centers to communicate results, health risks associated with lead exposure, and applicable plans for remediation with families whose children are enrolled in the school districts and centers.

[1] https://www.nrdc.org/sites/default/files/whats-in-your-water-flint-beyond-report.pdf
[2] https://www.edf.org/health/child-care-lead-water-requirements

- Require schools and childcare centers to submit plans for remediation to state health agencies upon exceedance of the action level specific to educational facilities.
- Revise the tap-sampling action level for schools and childcare facilities to utilize the best available peer-reviewed science in order to ensure maximal public health protection from lead in drinking water for children, infants, and pregnant women in these facilities (The American Academy of Pediatrics (AAP) objective for water fountains in schools reads "not exceed water lead concentrations of more than 1 part per billion.").

Action Level and Testing Methods

Regarding the lead action level and testing methods, we support the following proposed revisions to the LCR:

- Prohibiting flushing, cleaning, or removing faucet aerators prior to sampling
- Requiring increased sampling when sampling identifies high levels of lead

Declaring drinking water as "safe" when up to 10% of tap water samples are in violation of the action level is inaccurate and misleading to the public. Under this testing scheme, individual taps may continue to pose significant health risks for consumers. If we do not capture the worst-case scenarios, we are neglecting to acknowledge (and in turn remediate) the hazards that exist in service areas. Standards must be upheld at every tap. Additionally, even low levels of exposure to lead, particularly among children, can lead to negative health impacts.[3] In order to address the portion of taps (often located in environmental justice communities) permitted to have lead levels greater than the current LCR action level of 15 mg/L and the even larger portion of taps exceeding the suggested health-based action level of 5 mg/L, we recommend the following:

- Utilize the best available peer-reviewed science in order to ensure maximal public health protection from lead in drinking water. The current LCR's lead action level of 15 mg/L is not a health-based standard and poses a health risk to the community. We recommend a Maximum Contaminant Level (MCL) of 5 mg/L at the tap.
- Require the submission of lead service line replacement plans and corrosion control plans to state officials regardless of sampling results.

Partial Lead Service Line Replacements

According to the Centers for Disease Control and Prevention, partial lead service line replacements have been associated with short-term increases in lead levels in drinking water and has not been found to decrease risk for blood lead levels in children.[4] And studies now show long-term results as well.

A scientific study was published in the Environmental Science Technology on June 23, 2016 entitled *Evaluating the Effects of Full and Partial Lead Service Line Replacement on Lead Levels in Drinking*

[3] https://ntp.niehs.nih.gov/ntp/ohat/lead/final/monographhealtheffectslowlevellead_newissn_508.pdf
[4] https://www.cdc.gov/mmwr/preview/mmwrhtml/su6104a1.htm

Water[5], which concluded that "partial lead service line replacement more than doubled premises plumbing (L1, L2) lead release in the short term and did not reduce L1, L2 lead release in the long term. Even 6 months after partial LSLR, 27% of first-draw lead levels were greater than 15 μg L–1 (the U.S. EPA action level), compared with 13% pre-replacement."

And in that same journal, on August 9, 2017 a study was published called *Short- and Long-Term Lead Release after Partial Lead Service Line Replacements in a Metropolitan Water Distribution System*.[6] This research demonstrated that "61% of PLSLR samples still exceeded 10 μg/L, reflecting the importance of implementing full LSL replacement and efficient risk communication."

A 2004 EPA[7] study found that 72% of the LCR-mandated lead service line (LSL) replacements were partial replacements. According to the Environmental Defense Fund[8], as a voluntary commitment, full lead service line replacement throughout the entirety of a water system has been carried out in just 108 communities across the nation. In Pittsburgh, we have moved toward a protocol of full lead service line replacements for the last several years. The water authority (through testing) recognized elevated levels of lead in drinking water following partial lead service line replacements. For these reasons, we are grateful for the new revision's improved language to discourage this dangerous practice. This change is monumental, as it has been identified as a key policy solution to preventing childhood lead poisoning.[9]

In order to make an earnest pursuit of public health, we recommend the following regarding LSL replacements:

- In addition to areas with high lead-in-water levels, prioritize geographic areas of "high risk" for LSL replacement projects. High risk criteria should include high rates of elevated blood lead levels in children as identified by local or state health agencies, income-levels, and percentage of children under the age of 6.
- Combine the current 7% lead service line replacement requirement with the newly proposed **full** lead service line replacement requirement.
- Require full LSL replacements proactively as means to lead-safe systems, **not** emergency management. We join other water advocates in recommending the replacement of all lead service lines within 10 years.
- Prohibit partial lead service line replacements under any circumstance.

Water System Transparency

[5] https://www.ncbi.nlm.nih.gov/pubmed/27337040
[6] https://pubs.acs.org/doi/abs/10.1021/acs.est.7b01720
[7] US Environmental Protection Agency. 2004. U.S. EPA Lead Service Line Replacement Workshop Summary Report
[8] https://citiesspeak.org/2019/10/21/epa-moves-to-overhaul-lead-and-copper-drinking-water-rule/
[9]https://www.pewtrusts.org/en/research-and-analysis/reports/2017/08/10-policies-to-prevent-and-respond-to-childhood-lead-exposure

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We are in support of the proposed changes that will increase consumer knowledge of where lead service lines are located and if the lead action level is violated. We support the following proposed requirements related to water system transparency:

- Require complete inventories of public and private lead services lines.
- Require public notification within 24 hours to residents whose tap water exceeds the lead action level.
- Require public education to consumers during water-related infrastructure projects that may disturb LSLs.
- Require reporting categories of "lead," "non-lead" and "unknown" in the comprehensive water service line inventory.

To ensure even greater transparency, we recommend the following changes:

- All leaded parts of a water service line system must be disclosed as part of the definitions in the new LCR. This includes goosenecks, pigtails, or other connectors made of lead.
- Criteria must be provided to the designations of "lead" and "non-lead."
- All water authorities must make their LSL inventories available electronically for the public.
- Water authorities must raise awareness about the risks of lead in drinking water and household practices that can prevent exposure as a regular practice, regardless of their sampling results. (We are disappointed that the proposed plan for risk communication with the public is only implemented upon crisis when 10% of samples are above the action level. As with other public health issues, proactive preventative measures are the most effective, cost-saving solutions.)
- The method, content and frequency of communications required of water authorities for residents, school communities and early learning center directors and families must be clarified.

Thank you for the opportunity to provide input on these critical revisions to the Lead and Copper Rule. We hope the final updates reflect a commitment to the public health of our communities. If you have any questions, please contact me at michelle@womenforahealthyenvironment.org or 412-404-2872.

Sincerely,

Michelle Naccarati-Chapkis
Executive Director
Women for a Healthy Environment