



Clarifications Needed to Strengthen the Lead and Copper Rule Working Group's Recommendations for Long Term Revisions to the Federal Lead and Copper Rule

The August 24, 2015 final report from the National Drinking Water Advisory Council (NDWAC) Lead and Copper Rule Working Group (LCRWG) to the NDWAC presents a series of recommendations intended to improve the public health protection and implementation of the federal Lead and Copper Rule (LCR) through proactive lead service line (LSL) replacement programs, more robust public education requirements, stronger corrosion control treatment (CCT) requirements, and modified monitoring requirements. A proactive, consumer-centric approach to the EPA's upcoming revisions to the LCR is an excellent strategy for improving public health protection by reducing consumer exposure to lead in drinking water.

The following clarifications to those recommendations are needed, however, to ensure that the public health protections of the LCR are increased and not reduced (LCRWG recommendations in blue):

1. **Require proactive full LSL replacement programs** which set replacement goals, effectively engage customers in implementing those goals, and provide improved access to information about LSLs (in place of current requirements in which LSLs must be replaced only after a lead action level (LAL) exceedance).

This is an excellent strategy for improving public health protection under the LCR. However, a series of clear requirements and definitions are needed to ensure this strategy is clear, enforceable, and enacted as intended:

- 1.1 Require public water systems (PWSs) to develop an accurate inventory of lead service lines. Failure to complete is a violation.
- 1.2 Require PWSs to develop a full LSL replacement program, with details available online, including:
 - A prioritization scheme that targets neighborhoods with LSLs, child care centers, and areas with highest blood lead levels; a financing strategy that guarantees private-side LSL replacement for low-income customers; and failure to implement the full LSL replacement program returns PWSs to compliance with the existing LCR
- 1.3 Provide an objectively measurable definition of a PWS's "meaningful" effort to work with homeowners; failure to comply with that definition is a violation.
- 1.4 Include an explicit ban on partial lead service line replacement.

2. **Establish more robust public education requirements for lead and LSLs**, by updating the Consumer Confidence Report (CCR), adding targeted outreach to consumers with lead service lines and other vulnerable populations (pregnant women and families with infants and young children), and increasing the information available to the public.

Public education is a critical component of the LCR to allow customers to protect themselves from lead exposure. The following recommendations are provided to ensure that customers receive the information they need from their PWS to protect themselves from lead in water:

- 2.1 Require notification of the presence of LSLs to homes with LSLs, to both residents and home buyers; consumers must have information to take decisive actions to protect themselves from lead
- 2.2 Public education materials must include the following information:

- Clear information on the health harm associated with exposures to lead in water of fetuses, infants, and small children
 - The consumer must take appropriate precautions to prevent harmful exposures
 - In cases where a blood lead level or household action level is exceeded, consumers have a right to a comprehensive assessment of lead sources
- 2.3 Make publicly available all lead-related information for the PWS, including all tap-sampling results and dates of collection, documentation of LSLs, sampling pools, sampling protocols, CCT, full disclosure of invalidated samples and reasons for invalidation
 - 2.4 Use consumer-centered risk communication best practices. All communications must be proactively public-health focused, and the goal of risk communication should not be to diffuse public health concerns.
 - 2.5 Public education under the LCR should build in the participation of citizens and stakeholders, specifically from low-income neighborhoods, neighborhoods with high concentration of LSLs, and parent groups.

3. **Revise the CCT guidance manual**, provide regular updates, and provide increased expert assistance on CCT to PWSs and primacy agencies. The LCR should continue to require re-evaluation of CCT during a change in treatment or source water and WQP monitoring.

The effectiveness of CCT is very closely tied to monitoring requirements at customer taps, and therefore must rely on a robust lead-in-water monitoring strategy. The following provisions must be in place for the strengthened CCT requirements to realize their full potential:

- 3.1 There must be an ongoing feedback loop between increased monitoring for WQPs and lead-in-water levels at homes. Research indicates that while WQPs remain unchanged at the treatment plant, lead concentrations can be changing at customers taps.
- 3.2 Create a trigger for a mandated comprehensive evaluation of all the factors that contributed to a LAL exceedance, establish mandated corrective actions, and develop a corrective actions tool box.
- 3.3 Provide regulatory language specifying the scope of the consultation required between the PWS and the state when considering source water and treatment changes.

4. **Modifying monitoring requirements:** A completely new strategy for tap monitoring relying on voluntary customer-initiated tap water sampling has been proposed.

This strategy will substantially weaken the connection between CCT and lead in tap samples, and will make any kind of long-term trend analysis practically impossible considering the LCRWG suggestion that different sampling protocols might be used based on household preference. Because PWSs cannot afford to conduct monitoring everywhere, it is imperative to monitor in the worst-case locations to protect public health. **Rather than adopt LCRWG voluntary monitoring strategy, strengthen the existing requirements with the following:**

- 4.1 Ensure that all PWSs conduct proper lead-in-water monitoring targeting highest-risk homes as follows:
 - Sampling at high-risk homes identified through the required LSL inventory; prohibit any variations on EPA recommendations for sampling protocols, including pre-flushing, aerator removal, and capping stagnation time; ban invalidation of proper samples
- 4.2 Define and mandate a single sampling protocol for PWS with no LSLs and one sampling protocol for PWS with LSLs, which includes a second draw sample. All other protocols are prohibited. Sample collection should reflect how water is normally used in homes (full flow, large mouth bottles).
- 4.3 For outlier household lead levels, create a follow-up sampling requirement (similar to monitoring required after a total coliform positive) to immediately investigate the cause of the high level and potential extent of lead exposure indicated by the outlier, with associated violations for failure to monitor.

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