

**Lead and Copper Rule Revision
EPA Questions Sent to the SAB Lead and Copper Rule Workgroup**

April 6, 2020

Predictive Tools for Lead Service Line Inventory Development

The Environmental Protection Agency published, on November 13, 2019, proposed regulatory changes to the Lead and Copper Rule (LCR). The first major requirement to be implemented under this rule proposal is development of lead service line (LSL) inventories by public water systems which would help to identify at risk locations and consumers.

The EPA, states and communities would benefit from the SAB's scientific review of on the available non-disruptive technologies that can locate lead service lines. Such a review would enable EPA to improve guidance and would inform state and public water system's actions to implement LCR revisions.

1. What conclusions can be drawn about the efficacy of statistical methods for predicting the presence of lead service lines regarding their sufficiency to support use in developing a lead service line inventory?
 - a. What input variables are critical for the statistical modeling to produce good results? (Examples: known date for use of lead materials in water system, extensive knowledge of a water system's side of the inventory to help guide customer side models, and/or good documentation/record-keeping on utility side service line replacements)
 - b. If locations are predicted by statistical analysis as not likely to contain lead service lines what standard is sufficient, if any, to allow a water system to indicate in the inventory that no lead service line exist at these locations?
2. EPA is aware of a number of methods, both intrusive and non-intrusive, that attempt to identify the location of lead service lines on a site-specific basis. These include visual inspection of the service line entering the home or meter box, inspection via a camera inserted in the curb box, potholing technologies, and full trench excavation. What conclusions can be drawn on which of these or other methods may most accurately determine the presence of a lead service line while also providing cost efficiency and minimization of the risk of a lead spike from potential LSL disturbance during identification?
3. EPA is aware of science suggesting that galvanized service lines that are or were downstream of an LSL may have accumulated lead in interior scale deposits which may contribute to lead release. Where records do not exist, is it possible to determine whether a galvanized service line ever had an upstream LSL which is no longer in place?

Effective Lead Public Education Programs

The proposed revisions to the Lead and Copper Rule identify a number of new actions that water systems would be required to take to educate consumers about lead in drinking water and to inform their actions to reduce exposure to lead. These proposed revisions include: annual notification to

customers with lead service lines or service lines of unknown material; annual notice to state or local health departments; WIIN Act 24 hour public notice to customers when the lead action level is exceeded; 24 hour notice to individual customers who have a tap sample greater than the action level; notice to customers who have a lead service line disturbance due to water system emergency repair; and notice to schools and child care facilities regarding drinking water testing.

The EPA is seeking scientific review of the methodologies to ensure the maximum effectiveness of public education programs for lead in drinking water, and poses the following questions to the SAB:

4. What is known about the effectiveness of various models of public health information campaigns to change individual and/or societal behavior (i.e., take an action to protect against risk)?
5. How effective are social media platforms for providing information about lead in drinking water, the health effects of lead, sources of lead in water and action to reduce exposure?
6. What are the most effective modes and frequency of distribution of health information to ensure awareness without oversaturation?