

EPA Flint Safe Drinking Water Task Force Recommendations Regarding City of Flint Fast Track Plan for Lead Service Line Replacement

EPA has reviewed the City of Flint Fast Track Plan for Lead Service Line Replacement that was announced on February 9, 2016. EPA supports full lead service line replacement as an effective long-term approach to address lead contamination of drinking water, provided it is done properly. Below are recommendations from the EPA's Flint Safe Drinking Water Task Force.

Identification of Sites with Lead Service Lines

The Fast Start FAQs section notes that only 5,000 of an expected inventory of 15,000 sites with lead service lines have been confirmed. The Task Force recommends that the plan identify the procedure, or procedures, that will be followed to confirm the remaining sites. Some service lines may have segments of different materials, so it may not always be possible to just examine the line at the curb box. The plan must also address this situation.

Valve Assessment and Water Main Repair Contingency Plans

A number of the valves in the distribution system may not be accessible or have an unknown operational status. Since water main ruptures can happen during lead service line replacement, the Task Force recommends that the plan identify contingency plans if the event there is a water main rupture. The Task Force further recommends that the locations and functionality of the valves be assessed so that water main isolation and main repair/replacement can be conducted as quickly as possible to minimize service disruptions in the event of a water main rupture.

Communication Plan

The Fast Start Plan indicates that high-risk households will be targeted first for lead service line replacement. The replacement can cause disturbances that could affect other residences on that block that may have lead or unknown service lines. The Task Force recommends that the City develop and implement a communication plan that informs residents of upcoming work on their street and provides proper instructions for flushing following any water main or service line work. The Task Force further recommends that communication materials be provided educating homeowners of the risks of internal plumbing materials such as galvanized pipe or lead soldered joints.

Galvanized Line Replacement

Many of the service lines are lead from the main to the curb box, but another material from the curb box into the house. If there is any galvanized pipe in the segment of the line between the curb box and the house, then the Task Force recommends that the Fast Start Plan require replacement of the entire line, all the way to the house as there could be considerable lead/iron particulates in that portion of the pipe.

Particulate Removal Flushing Protocol

The Fast Start Plan must have a post-replacement particulate flushing protocol that will be followed to remove disturbed particulate from the interior plumbing after a lead service line replacement. This particulate removal flushing protocol could start from the outdoor hose, but it will need to cover all taps within the house. This flushing will be critical if the water filter is only provided for three months as noted in the current plan. The Task Force recommends that the Plan include a checklist to be completed at each site to ensure that all taps are flushed following the protocol.

Follow-up Sampling

The Task Force recommends that Fast Start Plan add follow-up sampling and analysis for lead at the end of the three-month period following lead service line replacement. This sampling would evaluate the effectiveness of the particulate removal flushing and determine whether water filters would need to be provided for a longer period of time. The Task Force intends to evaluate the results of lead service line replacement, including assessing how quickly lead in drinking water reaches acceptable levels. Until such a determination can be made, the Task Force recommends that residents continue to use filters for drinking and other consumptive uses.

Coordination with Water Main Work

If the City is considering water main replacement, either because the mains have exceeded their useful life or are being downsized to accommodate the lower demand, then the Task Force recommends that the plan consider replacing all lead, and associated galvanized, service lines in conjunction with the main replacement. This would be more cost effective and would reduce the need for contingency plans and communication plans to address lines that may be disturbed, but not replaced under the current prioritization process.