MCSD Upcoming Service Line Pipe Material Inspections



In 1991, the EPA published the Lead & Copper Rule (LCR) to minimize lead and copper in drinking water. Since then, several revisions have been made to strengthen the LCR, all of which MCSD abides by. For example, the district performs water sampling of the distribution system which get reported in the yearly Consumer Confidence Report (Found on MCSD Website). The District has never seen lead or copper levels exceeding the federal or state maximums in the distribution system. In one of the more recent updates to the LCR, known as the Lead Copper Rule Revisions (LCRR), added a requirement to prepare and maintain an inventory of service line materials by October 16, 2024, for every distribution system in the US, regardless of testing results in the past. Therefore, the District has begun to follow the steps necessary to compile an inventory of all service lines served by its distribution system to satisfy this requirement.

The inspections are scheduled to start around October 20th, 2023, and conclude around January 20th, 2024. The Operations crew will be visually inspecting 331 water service lines randomly selected among the service lines within MCSD's jurisdiction. Customers selected will be notified prior to the start date. Both the MCSD owned side and homeowner owned side of the meter box will be tested as illustrated in Figure 1. The visual inspections will be performed using a scratch and magnet test on the piping of District's and customer's side of the meter. In some instances, this may require digging to expose the pipe so it can be scratched. When the pipe is scratched, if the area is shiny or if a magnet does not stick to the pipe, then it is a lead pipe. However, if the scratched area remains dull then the pipe is galvanized, and a magnet will stick to the pipe. In addition, the pipe can also be plastic, in which case no further testing would be necessary.



Figure 1 Diagram showing breakdown of ownership for an individual water service line.

MCSD ensures that in the event your water service line is randomly selected to be inspected for lead piping, water service will not be interrupted throughout the process of the visual inspection. Although the District doesn't anticipate lead pipes being found, in the event there is one found the homeowner will be notified of the finding within 30 days of the completion of the inventory per CA Water Board Guidance. Unfortunately, if a lead pipe is found on just the customer side, it is the homeowner's responsibility to have their service line replaced. However, the EPA and CA Water Board have made clear that funding will be available to apply for to cover the financial costs of having the line replaced. MCSD will provide more information regarding funding opportunities once those become available. In the event a lead pipe is found on the MCSD side of the meter, the service line will be replaced by the District. For more information regarding the methods MCSD used to determine the water service lines to be visually inspected, see paragraphs below. The bottom of the document contains links to various websites where more information can be found regarding the Lead & Copper Rule.

Methods

On August 4, 2022, EPA released *Guidance for Developing and Maintaining a Service Line Inventory* to support water systems with their efforts to develop inventories and to provide States with needed information for oversight and reporting to EPA. The guidance provides essential information to help water systems comply with the Lead and Copper Rule Revisions (LCRR) requirement to prepare and maintain an inventory of service line materials by October 16, 2024. MCSD has been preparing methods outlined below for the completion of the water service line inventory to comply with this rule. The primary goal of this rule is to demonstrate the absence of lead service lines in the water system infrastructure.

MCSD has done extensive research on methods set forth by the California Water Boards and US EPA for completing the inventory of all the water service lines. This will ensure the approach the District proceeds with will satisfy the requirements of the inventory. In 1986 the US amended the Safe Drinking Water Act, which prohibited the use of pipes which were not "Lead Free" in public drinking water systems. Therefore, service lines installed prior to 1986 have a possibility of being lead pipes. However, based on prior findings of pipes installed in California from 1950 to 1986, very little to no lead was used. Given the Districts inception as a water system was in 1973 there is a low chance lead service lines exist within our water systems service lines.

Using service line installation date records, the District narrowed down service lines installed prior to 1986. In accordance with sampling methods provided by the CA Water Boards, the District has elected to use a Stratified Random Sampling method to determine which of the pre-1986 service lines will be visually inspected by the Operations crew. The method involves calculating the minimum number of service lines needing field verification/visual inspection using a 95% confidence level (with +/- 5%

margin of error and 50% sample proportion approach). The pre-1986 service lines were then separated into three strata levels by year ranges which ensures random sampling are representative across the different time periods. The district received approval by CA Water Boards for this workplan which will be the basis for the service lines to be visually inspected.

For more information regarding the LCRR and creation of the service line inventory visit the following links.

- US EPA LCRR: https://www.epa.gov/ground-water-and-drinking-water/revised-lead-and-copper-rule
- California Water Boards Lead and Copper Rule: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadandcop-perrule.html#:~:text=The%20CA%20LCR%20protects%20the,corrosion%20control%20treatment%20is%20required.