Milwaukee
Water Works

Safe, Abundant Drinking Water.

Lead Service Line Data Review
Meeting and Conference Call
Friday, June 17, 2016
2:30 – 4:00 p.m.

What conclusions can we draw on the basis of results to date?

Results of all samples to date are included in the attachment.

Milwaukee Water Works (MWW) will work on the comparison of each site using the characteristics we have used in previous discussions: 1) the total number of the set of 12 sequential samples that contained detectable lead, 2) the highest lead level measured in any of the 12 sequential samples, and 3) the lead level measured in the 13th well-flushed sample. We will also analyze and present the data using the approach taken by the EPA for the Lead and Copper Rule, which is to calculate the 90th percentile of groups of similar samples. In addition, to help portray the variability of lead results in typical conditions, we will provide some results from prior samplings repeated at residences that were not undergoing construction. We will share these summaries with you no later than Wednesday, June 15th.

In order for this to be a robust analysis and discussion, I am asking that you review the data in detail and utilize methods you deem appropriate for analysis. I am asking that you share the results of those analyses with all attendees prior to the meeting so that we may all review them and be prepared to include the results in our discussion.

Background

There are four general categories of construction that have been sampled to date. For the meeting, please focus on the Partial LSL (2, below) and Meter inlet valves (3, below).

Here are the categories and the effort expended as of May 31, 2016 in each category:

1) Full LSL replacement, where both city side and private side were replaced, usually within days of each other
    a. Four residences, 130 samples from 10 sampling events
    b. Sampling is still in process. As of today, the duration of sampling varies from 6 days to 85 days after work was performed.
2) Partial LSL replacements, where the city side of the service was leaking and was replaced to solve the leak, and the homeowner opted not to replace the private side.
    a. Forty-eight residences, 1,417 samples from 109 sampling events
    b. Of the 48 residences, 27 were sampled the day after the work and 30 days later. Another 9 were also sampled 60 days after construction.

   c. As of today, 38 additional residences have just begun the sampling series. MWW would like to suspend offering sampling to new partial LSL replacements properties at this time. MWW will continue to sample to conclusion the 38 residences where sampling has already been offered.

3) Meter inlet valve, where the valve was leaking and the LSL in the basement just upstream of the water meter was cut in order to replace the meter inlet valve,
   a. Five residences, 139 samples from 13 sampling events
   b. All five residences have been sampled after work and 30 days later. Three residences have been sampled 60 days after work.
   c. Are these results consistent enough to discontinue sampling of meter inlet valves?
4) Sewer replacement projects, where the LSLs were exposed during the project but were not severed
   a. Four residences, 208 samples from 16 sampling events
   b. Samples were collected prior to construction beginning, the day after construction, about two weeks after construction, and about 1 month after construction.
   c. Additional sewer replacement projects are being bid out and will be sampled later this year.

The Partial LSL group has a lot of results, and the Meter Inlet group has very consistent results.

C. Lewis, June 8, 2016