### **OPC 0034**

DATA INFORMATION REQUEST Missouri-American Water Company WU-2017-0296 FILED October 04, 2017 Data Center Missouri Public Service Commission

Requested From: Date Requested: Tim Luft 8/2/17

DPC Exhibit No. Ze Eater 211 Reporter UL File No. WU-2617-029

# Information Requested:

Reference direct testimony of Naumick p. 9, lines 13-14, wherein the witness states "full LSLR generally refers to the replacement of the service line from the water main to just outside the home or to the shut off valve within the premise." When replacing to "just outside the home" does the company leave some portion of lead pipe in place? If so:

- a. does replacing the service line to "just outside the home" cause the same "physical disturbance of the lead service line" described by the witness at p. 7, line 18 of his direct testimony?;
- b. does replacing the service line to "just outside the home" have "potential to increase lead levels following replacement" in the same way the witness testifies a "partial" replacement would? If not, explain the difference.

**Requested By:** Timothy Opitz – Office of Public Counsel – <u>timothy.opitz@ded.mo.gov</u>

# **Information Provided**:

The company will make every reasonable effort to replace the entire lead service line from the main to the customer's shutoff valve within the premise. In some instances, this may be impractical or unsafe. Where impractical or an unsafe condition exists, the Company would replace to just outside the home. In either case, the Company provides the customer with instructions to flush their service line and premise plumbing, educates them on other ways to reduce their potential exposure to lead in drinking water and will offer sampling.

In the case where the majority, but not all, of the lead service line will be removed to just outside the home, a plastic spacer or non conductive coupling will be used at the point of connection. This situation will be explained to the customer and the customer can decide if they would like to hire their own contractor at their expense to perform any additional plumbing upgrade within their premise.

By removing a majority of the lead service line, the potential exposure risk is lowered. Protocols for post-construction flushing and sampling should be followed. MAWC may not be able to eliminate

all risks of lead in all cases, and it is important that the customer understands their responsibility for managing their home plumbing.

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## **OPC 0034 Supplemental**

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all risks of lead in all cases, and it is important that the customer understands their responsibility for managing their home plumbing.

### **Supplemental Information Provided:**

- a. A lead service line is physically disturbed whenever it is cut, bent, reshaped, connected to the new piece of service pipe or reconnected to a water main. The extent of the impact of the disturbance is relative to the amount of pipe scale that is broken during the disturbance and the length of the lead service line left in operation. A service pipe that extends from the curb line to the house is a significantly longer length of pipe than any short segment of pipe that may remain in the foundation wall if access inside the premise is problematic. In the partial replacement scenario, the remaining service line would have a greater lead surface area in contact with water. As a result, there would be a greater exposure risk of lead release from the pipe and scale than from a short segment of pipe in the "outside the foundation" scenario. The service pipes and plumbing would be flushed to remove broken scale fragments and loosen particles in either scenario.
- b. Field work that cuts, bends, or reshapes the service line can release lead. The potential for an increase in lead levels during construction may be due to breaking off of the pipe scale from lead pipe, cuttings from cutting a lead pipe and galvanic corrosion of a new copper pipe in contact with an old lead pipe. The impact of the remainder of a longer portion from a partial lead service line replacement is likely to be greater than the impact from a small portion of a piece of lead pipe through the foundation wall to the inside shutoff valve. The mass of lead remaining (in the form of lead pipe and the associated pipe scale that contains lead) is greater in the partial lead service line scenario.

Responsible Witness: Gary Naumick