



Department of Public Works  
Milwaukee Water Works

**Ghassan Korban**  
Commissioner of Public Works  
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Superintendent of Water Works

January 20, 2016

Sent via ERF System

Jeff Stone, Administrator  
Water, Compliance & Consumer Affairs  
Public Service Commission of Wisconsin  
610 North Whitney Way, 2<sup>nd</sup> Floor  
Madison, WI 53705

Dear Mr. Stone:

During 2015, the Milwaukee Water Works (MWW) replaced 15.2 miles of water main in the distribution system, in compliance with the Final Decision and Order of the PSC as part of docket 3720-WR-108. The Decision required between 15 and 20 miles of water main be replaced each year through 2020.

As MWW water main replacement miles increase, so do the number of lead services impacted by the construction. Water industry and public health research have shown that disturbance of lead services can cause elevated lead levels at the customer's tap. In 2015, MWW initiated a pilot to see if these effects were present in the Milwaukee water system. The design of the pilot and review of the results were accomplished with the input of the Milwaukee Health Department, Wisconsin Department of Health Services, Wisconsin Department of Natural Resources, and the US Environmental Protection Agency Region 5. Twenty-one residences were invited, and residents of six properties agreed to participate. They received comprehensive water testing for lead before water main replacement construction commenced, the day after the lead service to the property was connected to the new water main, and again approximately four weeks later. Results were consistent with studies performed by other agencies. At all six residences on the day after the lead service was connected to the new water main, the number of samples in which lead was detected and/or the levels of lead in samples had increased.

With this information, the MWW is immediately suspending water main replacement projects that include lead services. Work will proceed on only main replacements that include copper services, while agencies work together to develop a plan to move forward. The 2016 main replacement program included approximately 10 miles of replacements impacting copper services and 5 miles impacting lead services. While additional projects impacting copper services will be assessed, it is highly unlikely that more projects can be designed and bid out in time for construction this year. Therefore, the MWW's target to replace 15 miles this year will not be reached.

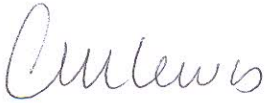


As noted above, the results of the MWW pilot were reviewed with representatives of Milwaukee Health Department, Wisconsin Department of Health Services, Wisconsin Department of Natural Resources, and the US Environmental Protection Agency Region 5. It was the strong and unanimous recommendation of these national experts that removing the entire lead service line is the preferable approach over partial lead service line replacement.

This is a matter of statewide public health concern for all utilities that have lead service lines. It also presents issues of how to address lead services lines on private property and financing options to assist homeowners for what can be very costly work.

We trust that the Public Service Commission of Wisconsin shares these concerns about how water main replacements with lead services impact public health and supports this proactive suspension of related work while alternatives are explored.

Very truly yours,



Carrie M. Lewis, Superintendent  
Milwaukee Water Works



Ghassan Korban, P.E., Commissioner  
Department of Public Works

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