



Tom Barrett  
Mayor

Bevan K. Baker, FACHE  
Commissioner of Health

**Health Department** Office of the Commissioner

[www.milwaukee.gov/health](http://www.milwaukee.gov/health)

Frank P. Zeidler Municipal Building, 841 North Broadway, 3rd Floor, Milwaukee, WI 53202-3653 phone (414) 286-3521 fax (414) 286-5990

January 25, 2016

Cathy Stepp, Secretary  
Wisconsin Department of Natural Resources  
101 S. Webster Street  
P.O. Box 7921  
Madison, WI 53707

Dear Secretary Stepp:

The mission of the City of Milwaukee Health Department (MHD) is to ensure that services are available to enhance the health of individuals and families, promote healthy neighborhoods, and safeguard the health of the Milwaukee community. One of the primary responsibilities of local health departments (LHDs), including the MHD, is to ensure that all residents and businesses within their jurisdiction have safe and potable drinking water. LHDs typically monitor drinking water for contaminants that pose a health risk to the population in close collaboration with water utilities. This partnership serves as the foundation for building effective waterborne disease surveillance, robust treatment, distribution system evaluation and meaningful policy development fundamental to protecting and preserving the public health of any community.

Studies conducted by the United States Environmental Protection Agency (USEPA) and the Centers for Disease Control and Prevention (CDC) have indicated that disturbance of lead service laterals, found in homes built before 1950, results in an increase in drinking water lead concentration. The release of lead containing scale and sediment from lead service lines during even minor disturbances has been found to contaminate drinking water and present a public health risk especially to vulnerable populations such as young children, pregnant women and breastfeeding mothers.

The MHD and the Milwaukee Water Works (MWW) have met with representatives from the USEPA, State of Wisconsin Division of Public Health and Wisconsin Department of Natural Resources to review data compiled by the City during a water testing pilot of select residential dwelling units conducted in 2015. There was unanimous consensus that the pilot indicated water main replacement that involves lead service lines creates an unacceptable and involuntary risk to the public in terms of drinking water exposure to lead.

The MWW is required by the Public Service Commission of Wisconsin (PSC) to replace a designated length (miles) of water distribution mains on an annual basis. In the City of

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Cathy Stepp, DNR Secretary  
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Milwaukee, this includes water mains connected to lead service lines at 70,000 residential and commercial properties. Conducting partial lead service replacement (portion typically maintained by the water utility) is no longer a viable option given the very real risk of lead exposure to residents. Furthermore, the USEPA is currently in development of revision to the Lead and Copper Rule reflecting the updated public health science on this matter.

Attached for your review is a recent letter from the MWW to the PSC describing the water utility's decision to temporarily suspend water main replacements in the City that involves lead service lines as well as a response by Mr. Jeff Stone, Administrator of the Commission's Division of Water, Telecommunications and Consumer Affairs. The response by Mr. Stone is neither reflective of the public health risk to City of Milwaukee residents nor helpful in developing an appropriate course of action. Mr. Stone's response is especially concerning considering that the replacement of lead service lines will also be an issue for numerous communities across the State who are in a similar predicament.

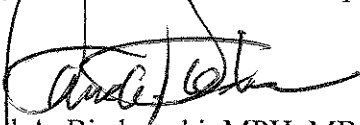
Finally, I appreciate your acknowledgement of this important public health issue and your willingness to work with the City of Milwaukee to create a State and local partnership to remedy this situation on behalf of all citizens in Wisconsin.

If you should have any questions or require additional information, please do not hesitate to contact me.

Sincerely,



Bevan K. Baker, FACHE  
Commissioner of Health  
City of Milwaukee Health Department



Paul A. Biedrzycki, MPH, MBA  
Director, Disease Control and Environmental Health  
City of Milwaukee Health Department

Attachments

CC: Kitty Rhoades, Secretary Wisconsin Department of Health Services



Department of Public Works  
Milwaukee Water Works

**Ghassan Korban**  
Commissioner of Public Works

**Preston D. Cole**  
Director of Operations

**Carrie M. Lewis**  
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.



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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,

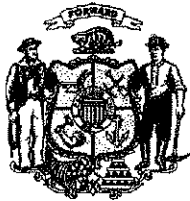


Carrie M. Lewis, Superintendent  
Milwaukee Water Works



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

CML:sls



# Public Service Commission of Wisconsin

Ellen Nowak, Chairperson  
Phil Montgomery, Commissioner  
Mike Huebsch, Commissioner

610 North Whitney Way  
P.O. Box 7854  
Madison, WI 53707-7854

January 22, 2016

Sent via ERF System

Ms. Carrie Lewis, Superintendent  
Milwaukee Water Works  
841 N. Broadway - Room 409  
Milwaukee, WI 53202

Re: Application of Milwaukee Water Works, Milwaukee County, Wisconsin, for Authority to Increase Water Rates 3720-WR-108

Dear Ms. Lewis:

Thank you for the status update on the main replacement efforts undertaken by Milwaukee Water Works (MWW) in 2015. In your letter you indicated that areas selected by MWW for water main replacement activities in 2016 included five miles of main containing lead services where MWW intended to replace only the main without coordinating replacement of the lead services. The Commission is committed to ensuring that all customers have access to clean, safe drinking water and I am concerned that MWW has apparently not proactively coordinated with its customers and the City of Milwaukee to ensure replacement of the lead services happens during the planned main replacements.

As you are likely aware, the need to replace lead services that were primarily installed in the early 1900s is not a new issue in Wisconsin. In fact, over the last 20 years, many communities have implemented lead service replacement programs and coordinated these efforts with planned infrastructure repairs. I strongly encourage MWW to do the same as it continues to replace its aging mains.

Considering that it is only January, I am also concerned about MWW's statement that it will not comply with the Commission's order requiring it replace 15 miles of main in 2016. MWW's distribution system consists of more than 1,900 miles of water main, some of which dates back to the 1870s. In both 2013 and 2014, the most recent data that has been filed with the Commission, MWW had the second highest nonrevenue water per mile of main of all Class AB utilities in the state. It also reportedly had a significant number of main breaks which result in costly emergency repairs. Even if 15 miles of main are replaced each year, it still would take more than 125 years for a full system replacement. The need to ensure MWW has safe, reliable mains and other infrastructure to meet the water needs of both Wisconsin businesses and residential customers has long been communicated to MWW by both its wholesale customers and Commission staff.

Ms. Carrie Lewis  
Docket 3720-WR-108  
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Ultimately, the decision of which mains to replace to meet the 15 mile requirement in 2016 must be made by MWW in coordination with its customers and the City of Milwaukee. If MWW is unable to meet this requirement, it should submit a request to the Commission seeking a modification of its order. This request should include a detailed plan for ensuring a sustainable main replacement program consistent with the Commission's order in its last rate case.

Feel free to contact me if I can be of any further assistance in helping MWW address the multiple issues it faces in providing safe, reliable water service.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Stone". The signature is written in a cursive, flowing style.

Jeff Stone  
Administrator  
Division of Water, Telecommunications & Consumer Affairs

JAS:pc DL:01284508