Navigating Michigan's Lead and Copper Rule Revisions: Part 1

18 Pilot Communities Collaborate to Implement New State Directives

By Christine Spitzley, OHM Advisors, Past Chair of MI-AWWA

ast summer, the State of Michigan passed the strictest requirements in the nation for action on lead and copper in drinking water. These revisions to the Michigan Department of Environment, Great Lakes, and Energy's (EGLE) Lead and Copper Rule (LCR) are intended to make drinking water safer for the State's residents. They are more stringent than the US EPA's 1991 regulations and require full compliance over the next 20 years.

As those affected by the rule changes now know, the LCR poses new and significant challenges for every water utility. It requires extensive efforts in inventorying and replacing water service lines on public and private property, increased sampling, creating and maintaining robust databases, and developing effective communication with affected citizens.

It's a tall order requiring a substantial amount of effort. Guidance on how to implement the rule changes is still under development, and most communities struggle with the lack of funding. Under the revised rule, water supplies are required to pay for lead service line replacements on both public and private property. There is also concern among communities about how to meet the rule's deadlines and whether unresolved legal issues will result in additional changes.

In response to these unprecedented challenges to Michigan's water utilities, the State awarded grant funds to 18 communities for a one-year pilot program to help them address this multifaceted effort. In support of this program, MI-AWWA has facilitated quarterly meetings with the pilot communities



to share information and provide mutual support, since it was clear from the start that many were experiencing the same issues. During the meetings, the pilot communities have shared their struggles and how they've overcome them, in the hope that other group members might take away useful information and ideas for practical solutions that they can apply in their own communities.

The ultimate pilot project goals are to share ideas and workable practices developed through the pilot program, and to provide real life examples of the challenges, solutions, and true costs associated with implementing the LCR. Ultimately, EGLE plans to use the experiences and data from the pilot communities to convey the very real need for additional funding to support communities in complying with the LCR.

At its spring meeting, the MI-AWWA Board created a task force dedicated to compiling the knowledge and expertise gained from this pilot program and other experienced Michigan utilities. Its goal is to establish a searchable resource for members to utilize as they work to implement the LCR.

"MI-AWWA exists to lead the advancement of water knowledge and improve the value and quality of water in our lives," said Bonnifer Ballard, MI-AWWA Executive Director. "We believe this resource will be a key source of information for our members for years to come." Inventorying Service Lines The updated LCR requires all Michigan community water supplies to update their distribution system materials inventory to determine where lead or galvanized steel water service lines might exist. They are required to submit preliminary inventories of existing records to the State by January 2020, with final physically verified inventory submissions due in 2025.

Already, the inventory requirements have been a major undertaking for communities due to lack of complete records, and the need to access lines on private property. Communities began working on these inventories as EGLE was simultaneously navigating specifics on the inventory requirements. Both groups are working hard to create efficient, cost-effective approaches to this effort that will result in accurate databases.

"As an older city with an older system, Saginaw moved forward assuming that lead exists throughout the public portion of the system and promptly established a team to strategically address the new LCR," said Jennifer Drinan, Senior Project Manager and Saginaw Client Manager at OHM Advisors. "Due to Saginaw's proactive approach to the new regulations, the City was able to begin replacement of lead service lines upon being awarded pilot grant funding. They've excelled at creating the preliminary inventory requirement through focused efforts, working across multiple departments and strategic use of resources."

Through the pilot group meetings, communities have shared how they have performed desktop inventories using existing information and created databases to identify trends and hot spots to determine what is in the ground and where. They researched as-built plans, tap cards, permit records, and water reliability studies - and some of the larger communities field-surveyed with mobile data collection tools, using tablets and apps to gather pictures and onsite information. Some of them digitized and input that data into GIS databases, creating their own digitallymapped inventory resources.

Field-inventorying on private property has proven difficult. Even if communities have the right of entry to check meter and piping at the meter as part of normal work practices, contacting homeowners and coordinating the work is time consuming. Preparing and obtaining signatures on consent agreements for construction or inventory activities on private property is challenging and can often cause delays. Some communities allocated staff for door-to-door contact with residents in the evenings when they tend to be home. Other communities were uncertain where to start when it came to creating waivers in the first place.

"A great result from the pilot meetings was that the group fostered understanding and empathy among the communities," Drinan said. "Larger communities with available waiver materials knew they were a bit ahead, so they shared them with the group to help others move along their processes."

Construction and Field Assessments Between the inventory and replacement requirements under the LCR changes, communities have faced new construction challenges. The LCR's requirement to notify residents 45 days before beginning planned work on private property can complicate already-busy construction schedules, although it is possible under the rule to reduce this notification period for emergency repair activities.

In terms of who is doing the construction work, only a few of the larger pilot communities are using municipal staff, with most using construction contractors for the physical verification and replacement efforts. In pilot meetings

"MI-AWWA, EGLE, and the Michigan water utilities are all committed to providing safe, affordable drinking water to the citizens of Michigan." they have shared different methods to bid out projects, construction waivers for use in the field, and advice on equipment choices and techniques – sharing efforts which are evolving into best practices.

Educating the Public

Public education and outreach are key sections of the LCR, and must be done well to ensure project success. Communities are working to keep consumers apprised of line replacement plans and schedules and to explain the logic behind who goes first and why. They are also having to simultaneously educate consumers about their water system as a whole and how to reduce their potential risks, always keeping health and safety as the critical focus.

This level of detailed communication and interaction is new to many communities. In the pilot community meetings, they have shared ideas for and drafts of communication materials for their residents, including printed materials, door hangers, website content, and FAQs. A few communities needed to address language barriers and they shared translated materials.

Group Goals

MI-AWWA, EGLE, and the Michigan water utilities are all committed to providing safe, affordable drinking water to the citizens of Michigan. Working together, with support from MI-AWWA and EGLE, these pilot communities are leading the way to the LCR implementation.

"The Michigan AWWA has been acting as a facilitator between the pilot grant communities and EGLE and has been a big help to us all," said Paul Reinsch, City of Saginaw Water Treatment Division Superintendent and Chairperson-Elect for MI-AWWA. "The team effort approach is really important due to the complicated nature of the new rule. Hopefully, this effort will help EGLE give practical guidance that is workable and effective, and will show that community water supplies are committed to the task, and that with more funding, they will get the job done - and done properly - to provide safer drinking water to all Michigan residents."



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