

# LEAD AND COPPER RULE PROPOSED REVISIONS

*Supplying Water to the Public Rule*

*Cheryl Porter*  
*Chief Operating Officer*



# EPA and MDEQ

EPA	MDEQ
Different Dataset	Michigan Focused Dataset
Commenting Phase	Proposing Rules
Lead Service Line (LSL) Removal	Lead Service Line Ownership
Corrosion Control	Corrosion Control Water Quality Parameter
Compliance Sampling Protocols	Sequential Sampling
	Source Water
	Asset Management
	Action Level Lowered

# SDWA Lead and Copper Rule

- In 1991, the EPA adopted the Lead and Copper Rule (LCR) to minimize lead and copper in drinking water. The rule replaced the previous standard of 50 ppb, measured at the entry point to the distribution system
- The rule established a maximum contaminant level goal (MCLG) of zero for lead in drinking water and a treatment technique to reduce corrosion of lead and copper within the distribution system
- Revisions to the rule by EPA were made in 2000, 2004, and 2007
- State of Michigan Rule follows the Federal Rule
- Additional revisions to the LCR have been anticipated

# Lead and Copper Rule (LCR)

[www.epa.gov](http://www.epa.gov)

- Lead and copper enter drinking water primarily through plumbing materials. Exposure to lead and copper may cause health problems ranging from stomach distress to brain damage
- The **treatment technique** for the rule requires systems to monitor drinking water at customer taps. If lead concentrations exceed an action level of 15 ppb or copper concentrations exceed an action level of 1.3 ppm in more than 10% of customer taps sampled, the system must undertake a number of additional actions to **control corrosion**
- While not a level set based on health effect impact, if the action level for lead is exceeded, the system must also inform the public about steps they should take to protect their health and may have to replace lead service lines under their control

# USEPA Lead and Copper Rule Making

- Forming multi-agency group to look at lead and copper based on sound science using peer review model
- Seeking comment from limited sources in five key areas prior to rule making
- Additional information can be found at

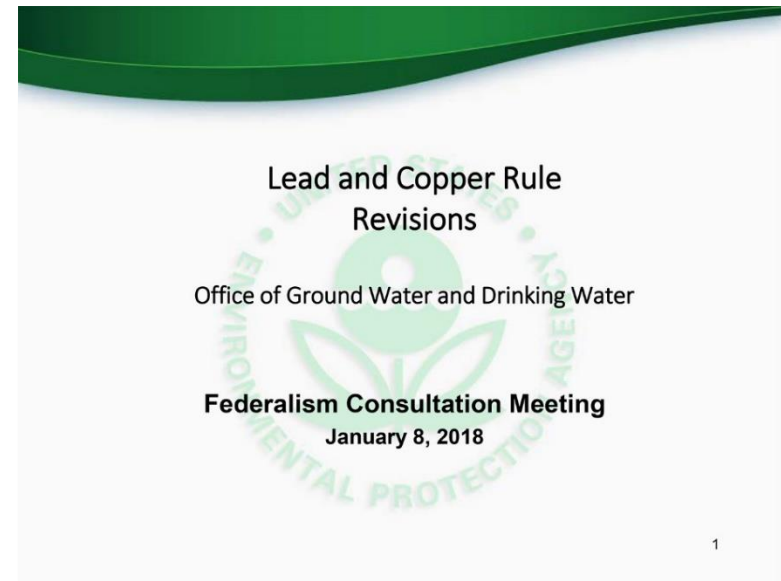
<https://www.epa.gov/dwreginfo/lead-and-copper-rule>



# Five Comment Areas for USEPA

- Lead service line replacement
- Corrosion control treatment
- Transparency and public education
- Tap sampling
- Copper revisions

GLWA submitted comments developed in conjunction with other stakeholders on March 8, 2018



# Coalition Formed to Develop Response to Proposed Changes and Key Messages



michigan municipal league



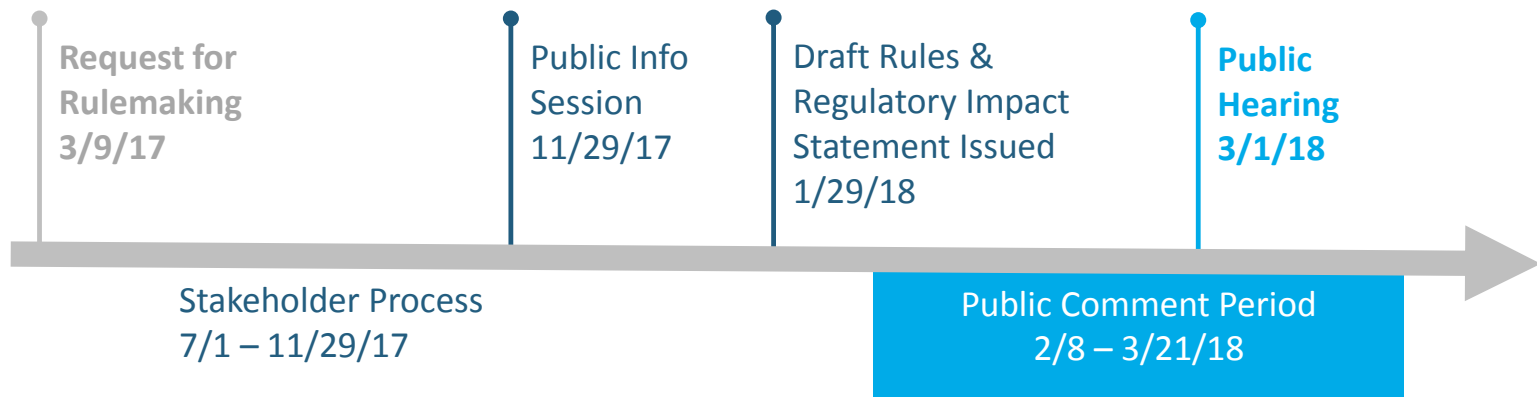
# MDEQ Lead and Copper Rule Proposed Changes





# Proposed Changes

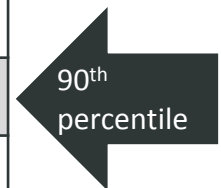
- Changes are designed to reduce exposure to lead in drinking water
- Goal to approve by the end of 2018 before Governor Snyder leaves office
- Coalition effort recommends rule changes are part of a statewide effort to reduce lead exposure



# Significant Changes

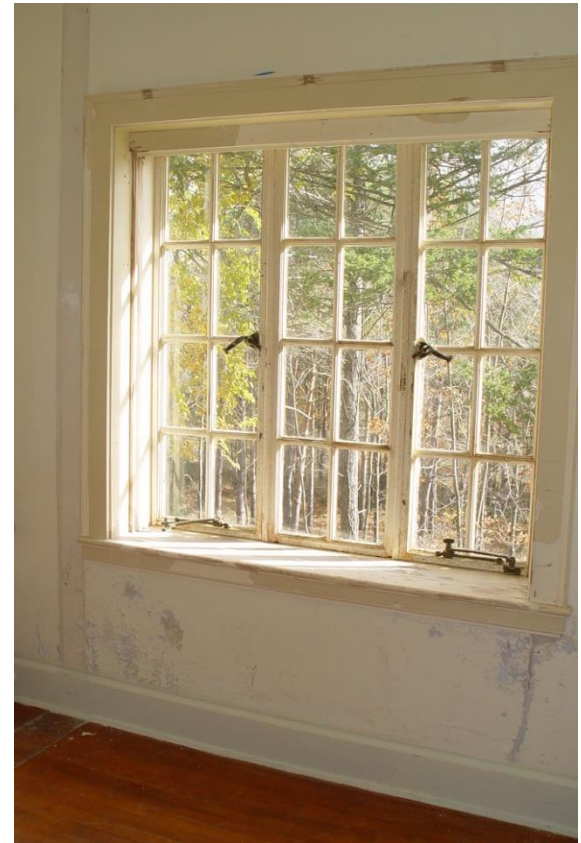
- Action level (corrosion control) being lowered from 15 ppb to 10 ppb by 2024
- Material inventory by 2020 and field verification by 2024
- New requirements on lead service line (LSL) replacement when >5 ppb
- LSL replacement as part of asset management when <5 ppb
- Water Advisory Council required if water system serves more than 50,000 people
- No health effects level is being established

Sample	Lead Result
1	0 ppb
2	0 ppb
3	0 ppb
4	0 ppb
5	0 ppb
6	0 ppb
7	0 ppb
8	0 ppb
9	5.5 ppb
10	6 ppb



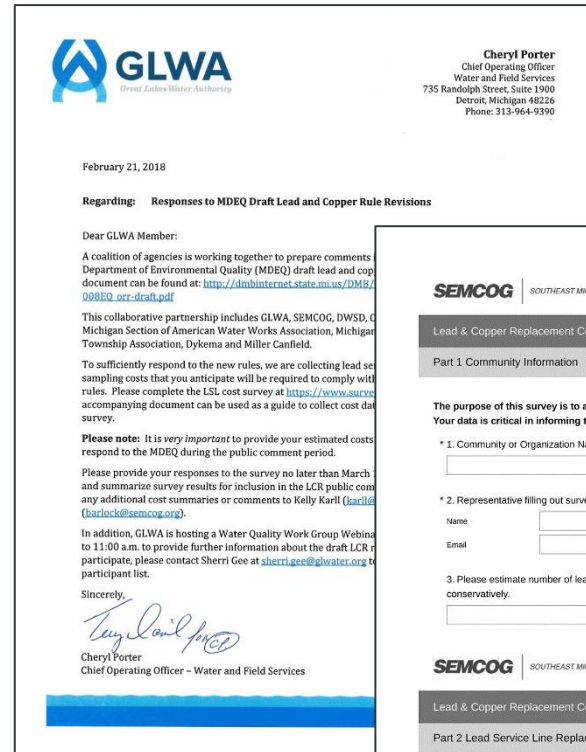
# Addressing Other Sources of Lead

- Worked with Metro Coalition of SEMCOG and health professionals
  - Known sources of lead, like paint, require prioritized funding
  - Governor's Commission on Lead Report to effect reduction in lead exposure connects state programs (MDEQ Rule needs to occur in that context)



# GLWA Surveyed Members to Formulate Comments to MDEQ

- Sent out February 21, 2018 on collecting lead service line replacement and sampling cost estimates
- Key comments from March 1 meeting were generated
- Responses were due on March 8, 2018
- Comments are due on March 21, 2018



**SEMCOG** | SOUTHEAST MICHIGAN COUNCIL OF GOVERNMENTS

Lead & Copper Replacement Costs

Part 1 Community Information

The purpose of this survey is to aid in responding to the DEQ during the public comment period. Your data is critical in informing the cost benefit analysis.

\* 1. Community or Organization Name

\* 2. Representative filling out survey  
Name   
Email

3. Please estimate number of lead service lines in your system. If you don't know, please estimate conservatively.

**SEMCOG** | SOUTHEAST MICHIGAN COUNCIL OF GOVERNMENTS

Lead & Copper Replacement Costs

Part 2 Lead Service Line Replacement - Water Main to Curb Stop.

Please consider the following in your estimated cost for this portion of the replacement. Where applicable, be sure to include costs for materials, labor, and equipment. Also consider internal administration costs (finance, GIS mapping, etc).

# Coalition Promoting Comprehensive Approach to the Lead Exposure Health Problem

- Use asset management to guide decision making on LSL replacement
- Look at how water fits into addressing overall problem of lead exposure in children, pregnant women and vulnerable populations



# Wrap Up



# Summary

GLWA team is working with Stakeholder Meeting, Coalition, and MI-AWWA to provide key information to member partners

- Webinar on February 27, 2018
- Completed SEMCOG survey on LSL replacement costs on March 8, 2018
- Comment letter template for EPA distributed on March 7, 2018
- Comments made by GLWA CEO to EPA on March 8, 2018
- Currently, comment template for MDEQ being drafted



March 8, 2018

Ms. Iliriana Mushkolaj, PhD  
Physical Scientist  
Office of Standards and Risk Management  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue NW  
Washington, DC 20460-0001

RE: **Public comments - Lead and Copper Rules UMRA/Federalism Consultations, Docket No. EPA-HQ-OW-2018-0007**

Dear Ms. Mushkolaj:

Thank you for the opportunity to offer comments to the U.S. Environmental Protection Agency as part of the Lead and Copper Rule (LCR) federalism consultation. The Great Lakes Water Authority (GLWA) is the provider of choice for water and wastewater services to 127 municipalities in seven Southeastern Michigan counties, serving 3.9 million customers. With the Great Lakes as source water, the GLWA is uniquely positioned to provide its customers water of unquestionable quality. GLWA has capacity to extend its service to other Southeastern Michigan communities. The authority offers a Water Residential Assistance Program (WRAP) to assist low-income residential customers throughout the system. The GLWA Board of Directors includes representatives throughout Southeastern Michigan.

We offer a number of solution-oriented approaches for your consideration. We are also communicating these approaches with the State of Michigan Department of Environmental Quality in response to their revised draft lead and copper rules.

First and foremost, addressing lead exposure is a collaborative responsibility between federal, state and local agencies. This responsibility extends across multiple state and local departments, not primarily water service providers. Without the coordinated actions across state and local health departments, water service providers and licensing agencies, the ability to identify and eliminate sources of lead exposure will continue in a haphazard manner. Investments must strategically address multiple sources of lead exposure, including paint and dust, soils, indoor plumbing, lead service lines and other household items. Furthermore, specific drinking water solutions at the local level must recognize the shared responsibility between consumers and water service providers.

With this background, we offer the following considerations as part of this federalism consultation:

- When a change in source water is proposed, a coordinated evaluation and technical analysis must occur to address potential corrosion control treatment requirements.
- A federal rule that requires all water systems to use the same corrosion control treatment does not address allow for flexibility for local water quality and operational considerations.
- Incorporate lead service line replacements as part of the community's asset management program. A community's asset management program facilitates strategic investments and

[www.glwater.org](http://www.glwater.org)

# GLWA Lead and Copper Rule Consecutive System Changes





# GLWA LCR Consecutive System

- GLWA is currently considered a Consecutive System on reduced monitoring for the Lead and Copper Rule (LCR)
- US EPA will no longer allow LCR sampling numbers to be determined using the current consecutive system process
- Two likely outcomes depending on the LCR rules change underway by MDEQ:
  - Scenario A: Annual full chart LCR sampling
  - Scenario B: Annual reduced chart LCR sampling

# GLWA LCR Comparison Chart

## Lead and Copper

	Consecutive Reduced System	Annual Full Chart Rule	Annual Reduced Rule	Annual Increases	Annual Increases
	(Current)	(Scenario-A)	(Scenario-B)	(Scenario-A)	(Scenario-B)
Communities	103	103	103	0	0
Samples	816	5,305	2,705	4,489	1,889
Frequency	3 Years	1 Year	1 Year	1 Year	1 Year

## Water Quality Parameters

	Consecutive Reduced System	Annual Full Chart Rule	Annual Reduced Rule	Annual Increases	Annual Increases
	(Current)	(Scenario-A)	(Scenario-B)	(Scenario-A)	(Scenario-B)
Communities	103	103	103	0	0
Samples	250	801	567	551	317
Frequency	1 Year	1 Year	1 Year	Same	Same

# GLWA Total Coliform Rule Modified Consecutive System Changes



# GLWA Modified Consecutive System

- GLWA currently considered a Modified Consecutive System (MCS) for Total Coliform Rule (TCR)
- 742 TCR samples/month for 84 communities (monitored weekly); 1,103/month for 103 communities
- EPA/MDEQ will no longer allow MCS – monitoring will change to TCR full chart
- Proposed change 3,036 TCR samples/month for 84 communities; 3,409 TCR samples/month all communities

\* Budgetary impact not considered

Population Served	Samples/ month	Population Served	Samples/ month	Population Served	Samples/ month
25 to 1,001	1	21,501 to 25,000	25	450,001 to 600,000	210
1,001 to 2,500	2	25,001 to 33,000	30	600,001 to 780,000	240
2,501 to 3,300	3	33,001 to 41,000	40	780,001 to 970,000	270
3,301 to 4,100	4	41,001 to 50,000	50	970,001 to 1,230,000	300
4,101 to 4,900	5	50,001 to 59,000	60	1,230,001 to 1,520,000	330
4,901 to 5,800	6	59,001 to 70,000	70	1,520,001 to 1,850,000	360
5,801 to 6,700	7	70,001 to 83,000	80	1,850,001 to 2,270,000	390
6,701 to 7,600	8	83,001 to 96,000	90	2,270,001 to 3,020,000	420
7,601 to 8,500	9	96,001 to 130,000	100	3,020,001 to 3,960,000	450
8,501 to 12,900	10	130,001 to 220,000	120	3,960,001 or more	480
12,901 to 17,200	15	220,001 to 320,000	150		
17,201 to 21,500	20	320,001 to 450,000	180		



**GLWA**

*Great Lakes Water Authority*