

# Michigan Lead and Copper Rule Revisions

Molly Maciejewski, Public Works Manager, City of Ann Arbor

# Acronyms Used in this Webinar

Acronym	
AL	Action Level
AMP	Asset Management Plan
CCR	Consumer Confidence Report
CCT	Corrosion Control Treatment
CWS	Community Water System
LSL	Lead Service Line
LSLR	Lead Service Line Replacement
NTNCWS	Nontransient Noncommunity Water System
PN	Public Notification
ppb	Parts Per Billion
WQP	Water Quality Parameters

# Michigan LCR: A Brief History

- ▶ July 27 - December 2017: Stakeholder Meetings
- ▶ November, 2017: Public Meeting
- ▶ January 29, 2018: Draft Rule Published
- ▶ March 1, 2018 Public Hearing
- ▶ March 21, 2018 Public Comment Deadline
- ▶ May, 2018 JCAR Review
- ▶ May, 2018 Revised Draft
- ▶ June 14, 2018 Rule Finalized and Filed with Michigan SOS



Applies to CWS and NTNCWS

## Summary of Changes

Existing	Revised
Action Level 15ppb	Action Level 12 ppb
Defines Service Connection but not service line. Includes definition for lead service line	Added definition of Service Line and updated definition of Lead Service Line
Distribution system materials inventory maintained by water system, no updates, reporting or field verification required	Requires preliminary ( <b>“desktop”</b> ) and <b>field verified inventory. Includes</b> public and privately owned portions of service line. Requires periodic reporting, notification and updates
Sampling Pool by Tiers	Revised requirements for sampling pool selection
One First Draw Sample per site	If LSL: Two Samples per site
90 <sup>th</sup> ile based on all samples	90 <sup>th</sup> ile based on highest results per site
LSLR only if exceed AL after installation of CCT	LSLR required @ 5%/year or as part of an approved Asset Management Program
LSLR: Responsibility limited to publicly owned portion of line	LSLR requirement includes public and privately owned portions of LSL
LSLR: does not include replacement of galvanized lines	Includes replacement of galvanized lines that are or were connected to LSL
WQP monitoring requirements	Requires additional parameters and triggers for monitoring
Public Notification and Communication Requirements	Threshold population change for web postings, establishes requirement for Water Advisory Council, revised public education language

# Key Dates

- ▶ 90 Days of Rule = September 14, 2018: Establish and Appoint Members to Statewide Advisory Council (State Requirement)
- ▶ 180 Days of Rule = December 14, 2018: Establish and Appoint Members to Water System Advisory Council (Public Water Systems >50K)
- ▶ January 1, 2020: Preliminary inventory based on existing infrastructure
- ▶ January 1, 2020: Updated Sampling Pool
- ▶ January 1, 2025: AL reduced to 12ppb
- ▶ January 1, 2025: Field Verified Inventory

# Michigan LCR Revisions

## Service Line Definition

**“Service Line”** means the pipe from the discharge of the corporation fitting to customer site piping or to the building plumbing at the first shut-off valve inside the building, or 18 inches inside the building, whichever is shorter.

**“Lead Service Line”** means either a service line which is made of lead or any lead pigtail, lead gooseneck, or other lead fitting that is connected to the service line, or both

# Michigan LCR Revisions

## Materials System Inventory



- ▶ Preliminary inventory based on existing information
- ▶ Field Verified Inventory
  - ▶ Must keep record of refusals
  - ▶ If unable to verify, must assume LSL
- ▶ Must notify customers if served by LSL
- ▶ Requires periodic updates
- ▶ Requires submittal to state
- ▶ CCR requirements (new 2x year)

# Michigan LCR Revisions

## Service Line Replacement

- ▶ LSLR required @ 5%/year minimum, unless alternate schedule as part of an Asset Management Program is approved.
- ▶ LSLR requirement includes public and privately owned portions of LSL
- ▶ Presumes that the utility controls the entire service line unless it can demonstrate in writing that it does not
- ▶ Must replace galvanized lines that **are or were** connected to LSL. NOTE: No Sunset!





# Michigan LCR Revisions

## Sampling

- ▶ Sampling pools must be reviewed and/or updated based on current materials inventory, and submitted to the state by 1/1/2020
- ▶ Sample sites
  - ▶ Samples must be collected at sites with lead service lines or lead piping
  - ▶ If no lead service lines, collect from single family homes with copper piping and lead solder installed before July 1988
- ▶ For Systems with LSL: Two Samples per site
  - ▶ First Draw
  - ▶ 5th Liter
  - ▶ Minimum 6 hour Stagnation
  - ▶ No Pre-Flushing
  - ▶ Do not remove Aerator
  - ▶ Sample Collection by Resident or Water System
- ▶ 90th%ile based on highest result from each site



# Michigan LCR Revisions

## Water Quality Parameter Monitoring

- ▶ Addition of Chloride and Sulfate monitoring
- ▶ Requires WQP for all systems with OCCT
- ▶ Reductions allowed to annual (used to be triennial)



# Michigan LCR Revisions

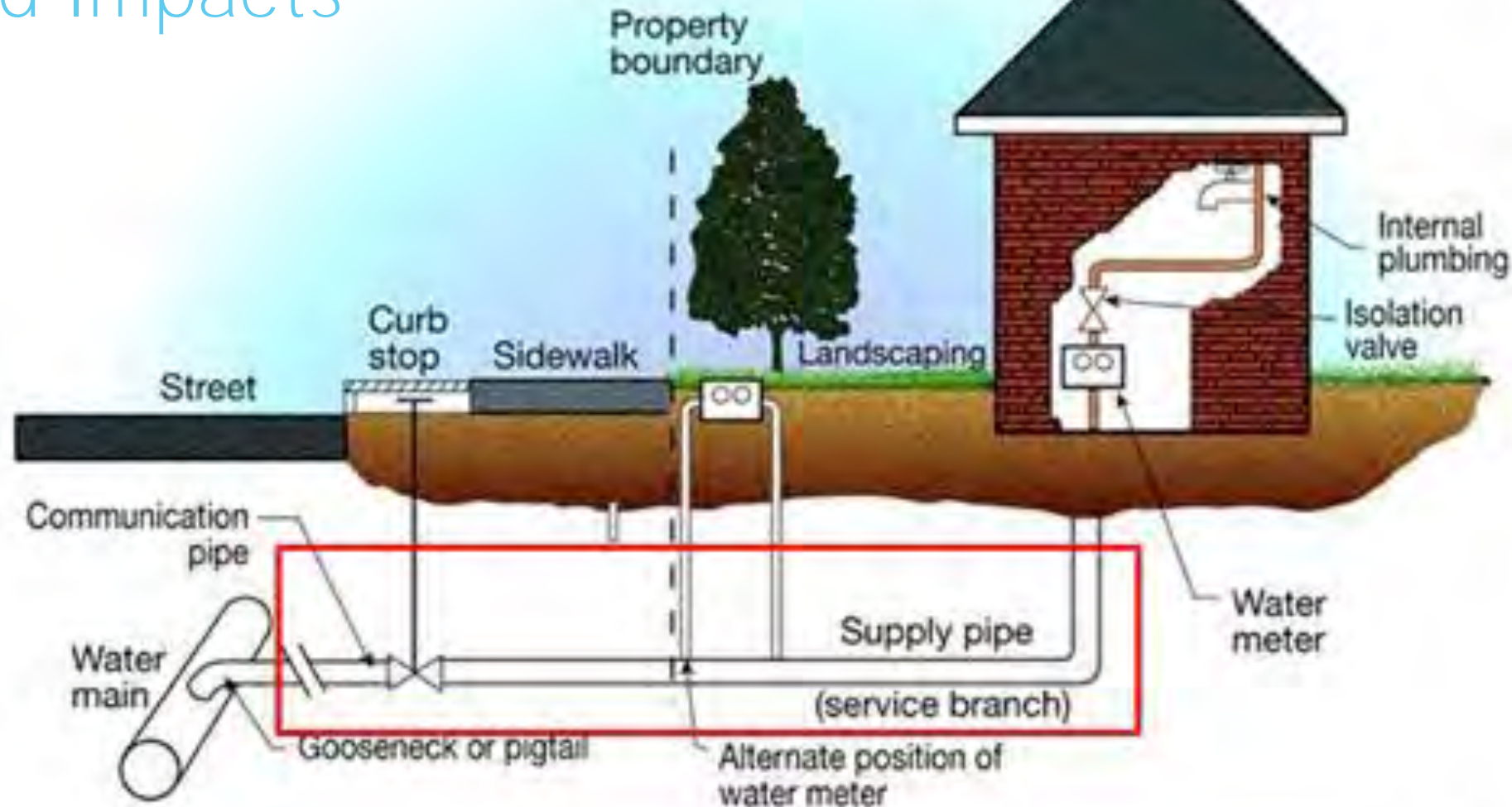
## Public Notification, Education and Communication

- ▶ Create Statewide Advisory Council to generate lead public awareness campaign
- ▶ Create Water Advisory Councils in large cities (> 50,000 population) to advise on distribution of educational materials in their community
- ▶ Public Education
  - ▶ Requires utilities serving more than 1,000 people rather than those serving more than 100,000 people to post information on their website
  - ▶ Adds requirements for communicating about the unpredictability of lead release, the limits of 1-time tests, the high lead content of some lead particulates, availability of certified filters and proper filter maintenance, and information about lead-free plumbing fixtures
  - ▶ **Adds community centers and adult foster care facilities to “at-risk” facilities**

# Continuity Source/Treatment Change

- ▶ Supplies purchasing water from a provider with OCCT must also maintain OCCT
- ▶ Rules clarify that DEQ may require new or updated CC studies when a supply changes source or treatment, or at any other time as appropriate

# Michigan Lead and Copper Rule Changes and Impacts



Timothy Phillips 2008

# Michigan Lead and Copper Rule Changes and Impacts

- ▶ New rule addresses galvanized service lines that were connected to lead
- ▶ All lead service lines on the City side have been removed
- ▶ City next steps:
  - ▶ Conduct paper inventory of customer-side service lines that were previously connected to lead goosenecks (January 1, 2020)
  - ▶ Develop replacement plan for these service lines



# Service Line Replacements

- ▶ Partial Service Line Replacements are Banned and allowed for Emergencies ONLY
- ▶ If AL exceeded with corrosion control - must replace 7% each year (no change from previous LCR)
- ▶ If AL not exceeded, must replace 5% per year or in accordance with approved schedule in Water AMP
- ▶ IS OR WAS



(a) A water supply shall replace all lead service lines, and galvanized service lines if the service line **is or was** connected to lead piping. Service lines that are physically disconnected from the distribution system are exempt from this requirement.

# Service Line Replacements

- ▶ Community will be responsible for entire service line replacement
- ▶ Community presumed to control the whole line unless it can prove otherwise
- ▶ Even if community does not own the whole line
  - ✓ It must offer to replace the private portion at the community's expense
  - ✓ If building owner does not consent - do not replace
  - ✓ If partial replacement done (Emergencies), must sample within 72 hours, must offer filters and instruct on flushing

**(e) A water supply shall replace the entire lead service line. If the supply does not own the entire service line, the supply shall notify the owner of the line, or the owner's authorized agent, that the supply will replace the portion of the service line that it owns and the owner's portion of the line at the supply's expense. If the building owner does not consent, the supply shall not replace any portion of the service line, unless in conjunction with emergency repair. A water supply shall complete all of the following tasks:**



# What's next?

## Questions?



## Resources

- ▶ AWWA Standard C810 on Replacement and Flushing of Lead Service Line  
<https://www.awwa.org/store/productdetail.aspx?productid=65628258>
- ▶ Lead Service Line Replacement Collaborative, <https://www.lslr-collaborative.org/>