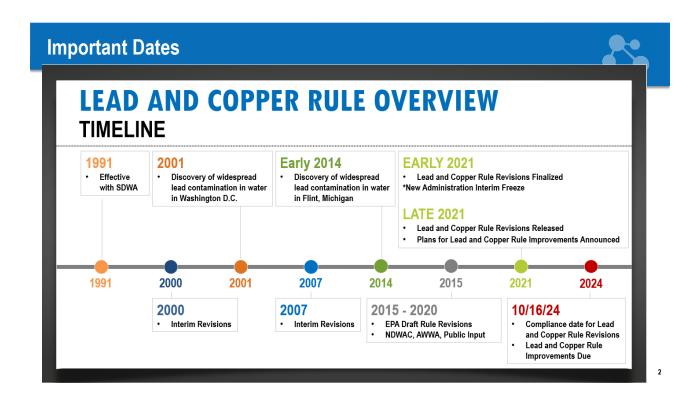


REVISED LEAD AND COPPER RULE GUIDANCE City of Great Falls

March 1, 2022

AE2S



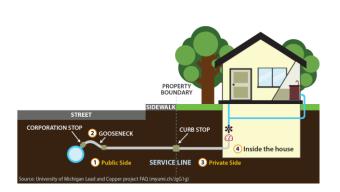
IMPLICATIONS OF RULE REVISIONS



- Lead Service Line Inventory
- Water Sampling
 - Including schools/child care
- Lower Key 90th Percentile (P90) Concentrations
 - Actions required at 10 μg/L instead of 15 μg/L
- Reporting, Public Notification
- Corrosion Control Treatment
 - pH/Alkalinity, orthophosphate

Lead Service Line Inventory







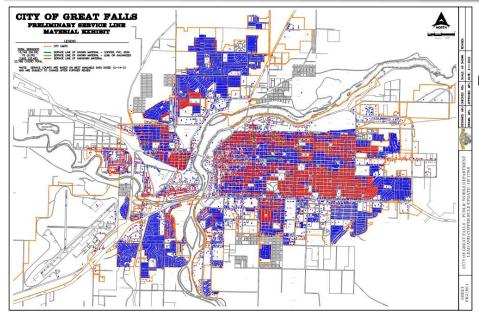






Lead Service Line Inventory





Methodology:

- Records
- Date of Install
- Recent Work
- Inspections

Lead Service Line Replacement



- Changes to Replacement Protocols
 - Partials DON'T Count
 - Public Notification
 - Flushing Requirements
 - Pitchers/Filtration Kits
- Potential Cost Impacts
 - 7,500 estimated lead service lines
 - \$5,000-10,000 each
 - Total Cost = \$37.5 \$75 million



Revised Sampling Method and Frequency





Current



30 samples every 3 years



School and Child Care Sampling

- Include all primary schools and licensed child care connected to the system
- 5 samples per school, 250 mL each
 - 2 drinking water fountains
 - 1 kitchen faucet using for food or drink prep
 - 1 classroom faucet
 - 1 nurses office faucet
 - If they don't have 5 places, sample everywhere that's used for consumption
- Cost Impact = \$41/sample







School and Child Care Sampling



- 2 samples per licensed childcare facility, 250 mL each
 - 1 drinking water fountain
 - 1 either kitchen faucet used for food or drink prep, or 1 classroom faucet or other outlet used for drinking
 - If they don't have 2 places, sample everywhere that's used for consumption
- Cost Impact = \$41/sample





9

School and Child Care Sampling



- Sample other schools on request
- Only required to do 20% of list each year
- Provide results to location with guidance on action plan





Important Limits



Medium (>10,000 & <50,000) & Large Systems (≥50,000 served)

| Limit | Public Notice | ccs | ССТ | Find & Fix | LSLR Rate | Sampling Schedule Change |
|--------------------|------------------|-----|-----|------------|-----------|--------------------------------|
| $PQL = 5 \mu g/L$ | - | X | X | - | - | - |
| TLE = $10 \mu g/L$ | X | X | X | X | X | Х |
| ALE = 15 μ g/L | X | X | X | Х | X | Х |

PQL = Practical Quantitation Limit

TLE = Trigger Level Exceedance

ALE = Action Level Exceedance

CCS = Corrosion Control Study

CCT = Corrosion Control Treatment

11

Financial Ramifications



- 2-3 lead service line inventory FTEs
- Lead service line replacement costs (\$75M)
- Increased sampling costs per year
 - Current cost = \$600 every 3 years
 - New costs = \$2,460 every 6 months*
 - School/Daycare Sample Costs
- Corrosion Control Study = \$50,000
- Corrosion Control Treatment = \$1,500,000



Financial Resources



- Infrastructure Act
 - Loans/Forgiveness
- ARPA
- CDBG
- MCEP/RRGL grants
- Rate Adjustments
- Tax/Property Assessments





13

What the City is Doing

8

- 1. Develop Approach to Service Line Inventory
- 2. Complete Preliminary List of Service Lines
- 3. Generate List of Schools and Child Care Facilities
- 4. Review Corrosion Control Treatment and Current Water Chemistry
- 5. Identifying FTE Needs/Cost Increases
- 6. Identifying Potential Funding Sources/Strategies

