EPA Lead and Copper Rule Revisions Update

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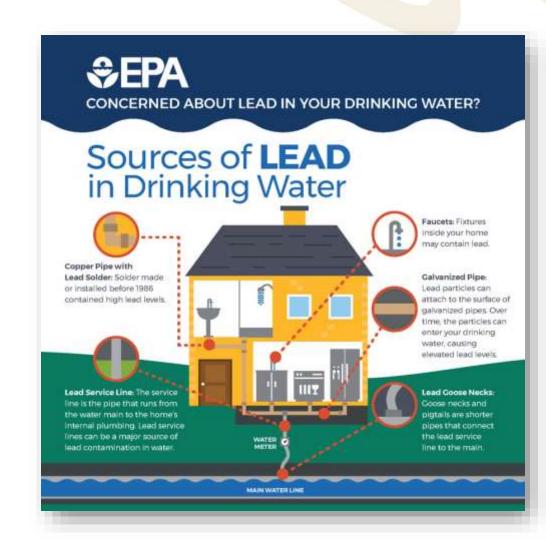
WQ & Regulatory Compliance Manager

Water & Sewer Board Presentation December 14, 2022



Overview

- Background
- EPA Lead & Copper Rule Revisions
- New Requirements
 - Schools and child care facilities
 - Sampling/testing
 - Service line inspection, replacement & inventory
- Greeley Water Actions
- Next Steps



Background

- Greeley's Water is lead-free thorough testing confirms high water quality delivered 24/7 from our treatment facilities.
- Homes or businesses built prior to 1981 may have pipes or plumbing containing lead that could impact water quality at a customer's tap.
- Greeley Water is launching a program to inspect customer service lines to identify and replace those containing lead.
- This program will support compliance with new EPA revisions to the Lead and Copper Rule.
- Our top priority is providing safe drinking water and protecting public health.





Background: Lead & Copper

General History

- 1800s and early 1900s: Lead was commonly used in plumbing and water distribution
- Beginning in late 1800s: Health effects were observed
- 1986: Congress banned use of lead water pipes
- 1991: Lead and Copper Rule published to reduce risks primarily through corrosion treatment techniques
 - Lead and copper can enter drinking water through corrosion of materials in distribution system and household plumbing
 - Common sources include service lines, faucets, solder, pipes, and fixtures



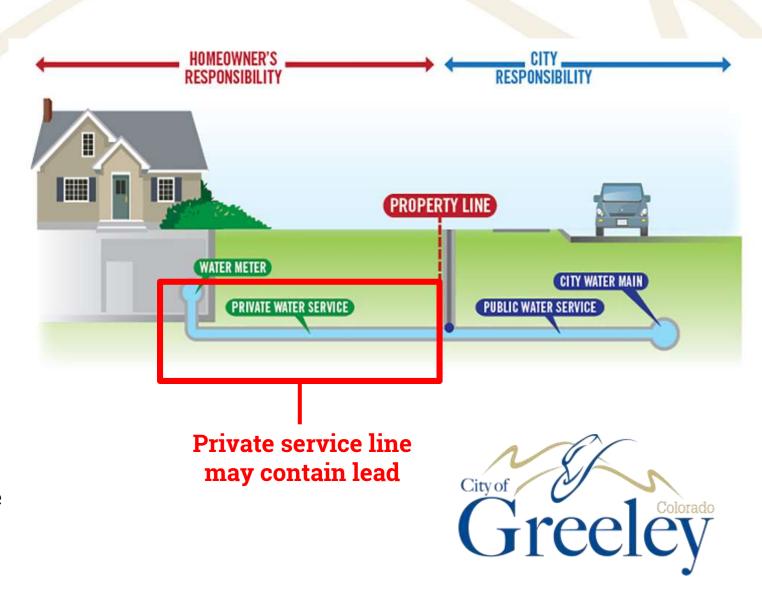
1936 photo of workers installing water pipes in an Indiana community



Background: Lead & Copper

What is a service line?

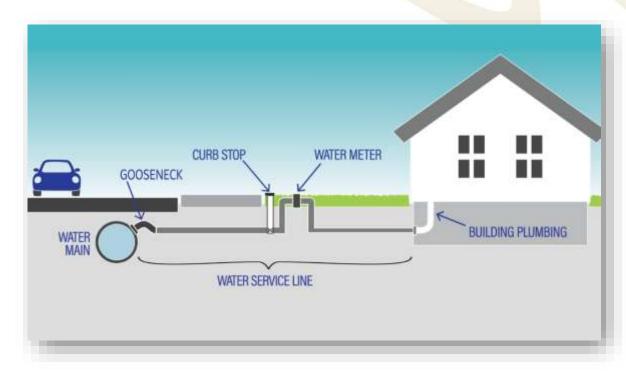
- A service line is the pipe that provides drinking water from a water main to customers homes
- Two Maintenance Responsibilities:
 - Public: From the water main to the curb stop
 - Private: from the curb stop to the internal plumbing



Background: Lead & Copper

Greeley History

- 1980: Greeley adopted 1979 International Plumbing Code in 1980 that banned lead in service lines
- Lead observed in service lines of some houses constructed before 1960
- Greeley began removing all known public/city lead lines in 1990s and continues those efforts today through:
 - Meter program
 - Cement lining program
 - Daily operations
- To date, Greeley has replaced 1,980 lead lines on the public/city side





- In response to the Flint, Michigan lead crisis, on Dec. 16, 2021 the EPA published regulatory revisions to the National Primary Drinking Water Regulation
 - Implementation date of Oct. 16, 2024
- New Lead and Copper Rule Revisions (LCRR) to provide greater protection for public health by reducing exposure to lead and copper in drinking water.
- Crucial for Greeley to develop and implement procedures to be in position to meet the new regulations prior to LCRR implementation deadline in 2024.



Schools and childcare facilities

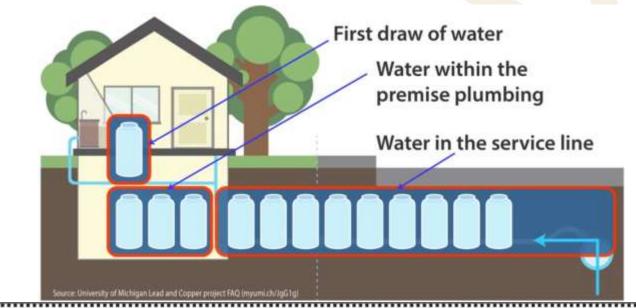
- Community water systems are required to test at childcare facilities and elementary schools
- Secondary schools can request testing anytime
- Provide information on how school or childcare facility can reduce lead in drinking water

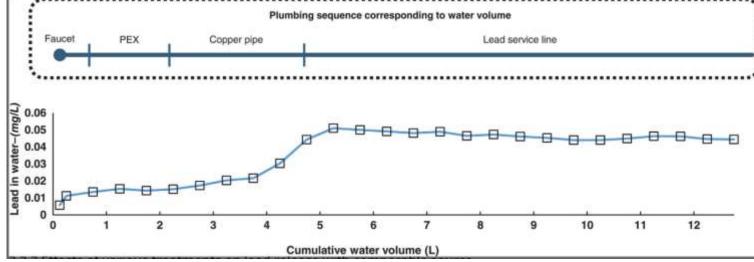




Changes to Site Sampling

- Collection Procedure
- Sample Site Selection
- Monitoring Frequency





15+ ppb

<u>Tap Sampling:</u> Standard monitoring every 6 months

<u>CCT:</u> Implement or re-optimize treatment

LSLR: Full replacement at 3% per year

Action Level 15 ppb

10-15 ppb <u>**Tap Sampling:**</u> Standard monitoring every year

<u>CCT:</u> Conduct new CCT study or re-optimize

treatment

LSLR: Full replacement at defined goal rate

NOTE: GREELEY IS
CONSIDERED TO HAVE
OPTIMAL CORROSION
CONTROL- MEANING OUR
TRIGGER LEVEL IS 5 ppb

Trigger Level 10 ppb

0-10 ppb **Tap Sampling:** Reduced monitoring every 3 years (Only if no LSL's present in system)

CCT: Maintain treatment and WQPs

LSLR: Voluntary



One ppb is one part of lead within one billion parts of water

Notification requirements

- Public notification within 24 hours of a
 90th percentile lead level > Action Level
- Provide notice to customers whose individual tap sample is > 15 ppb within 3 days





Notification requirements

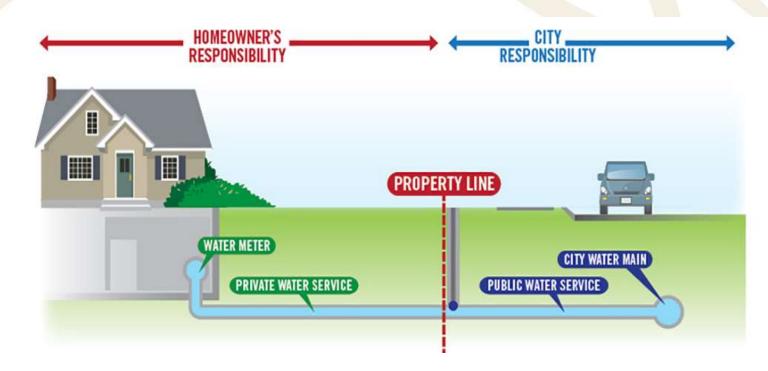
- Include educational material in Consumer Confidence Report
- Conduct annual outreach if Trigger Level is exceeded
- If action level is exceeded:
 - Deliver Printed material to schools, community organizations, hospitals and clinics, pediatricians, local welfare agencies, etc.
 - Post printed material on website
 - Submit press release to newspapers, televisions, and radio stations
 - Additional activities in consultation with the state





Service Line Replacement

- Replacement of all lead service lines to first fitting in house
- Requires replacement of galvanized steel downstream of any historical lead lines
- Greeley will be replacing lead customer service lines at no cost to customer
 - Private systems are excluded





Required Service Line Materials Inventory:

- Publicly available online
- Define service line materials on the public and private side
- Update annually
- Distribute annual notification letters to all customer with lead service line (LSL) or unknown service lines



Greeley Water Actions for LCRR

- Developed preliminary service line inventory and plan for inspections
- Budgeted for potholing & replacements 2023 2028 (\$10 million)
- Contracts with contractors for potholing & replacements
- Developed water quality sampling method for specific locations
- Online Questionnaire for Customer Service Lines at: greeleygov.com/leadprotection
- Developing communications for customers
- Expanding on existing corrosion control measures through study with Carollo Engineers to optimize Bellvue & Boyd WTP water to further minimize potential for corrosion of Lead & Copper lines
- Completing service line loop study for optimal corrosion control



Greeley Water Next Steps

- Begin inspections and potholing public and private service lines at 1,960 initial locations Jan/Feb 2023
- Begin service line replacements March/April 2023
- Update budgets for 2024-2028 based on contractor pricing
- Conducting exploratory water quality sampling at specific locations and providing water filters for locations where actionable levels exist
 - Presence of lead service line does not automatically mean water contains lead
- Distribution of customer Service Line Questionnaire \$50 credit to complete
 - Customers needing assistance should contact: waterquality@greeley.gov
- Outreach to schools and childcare facilities
- Ongoing communications to customers: "Lead Protection Starts With Inspection"
 Details at: greeleygov.com/leadprotection

Customer Requests



Complete online Questionnaire especially for homes built prior to 1981



Support testing and inspections – initial focus on 1,960 older homes/buildings



Stay informed through notifications and follow recommendations



Inspect older plumbing and fixtures inside homes/buildings – replace and/or use filters if not certified lead-free



Contact our team with questions: waterquality@greeley.gov

Questions?



