

Lead & Copper Rule Revisions

Summary by Suzy Folsom
November 10, 2021



Rule Overview

- Rule to protect public health
- Drinking Water Public Supply
- New Requirements in the revision
 - Pipe Inventory
 - Increased Sampling and Reporting
 - *Quantity*
 - *Frequency*
 - *Schools and Childcare Facilities*
 - Increased Treatment
 - Lead Service Line Replacement
 - Public Outreach

Why is lead bad for humans?

- Reduced IQ
- Harmful to children
- Interferes with Calcium
- Stored in bones and teeth
- Cumulative effects



Pipe Inventory

October 16th, 2024

Categories:

1. Lead
2. Galvanized requiring replacement
3. Lead status unknown
4. Non-lead

Publicly accessible

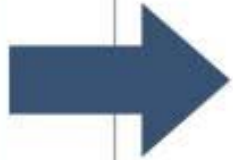
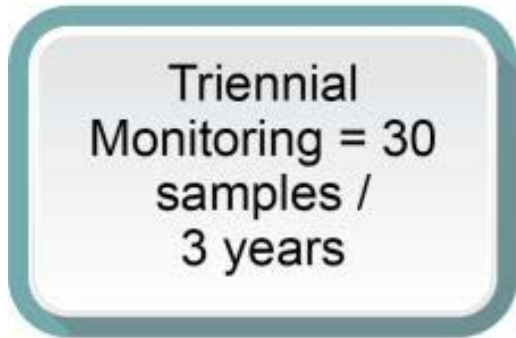
Online if > 50,000 people

Updated over time

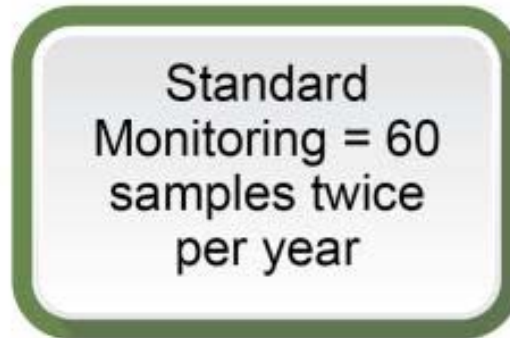


For systems serving a population of 10,000 to 100,000:

BEFORE



AFTER



More
Water
Quality
Sampling

System Population	Samples
>100,000	100
10,001 –100,000	60
3,301 –10,000	40
501 –3,300	20
101 –500	10
<100	5

Water
Quality
Samples
Required

90th Percentile

15+
ppb

Required Actions

Tap Sampling: Standard monitoring every 6 months
CCT: Implement or re-optimize treatment
LSLR: Full replacement at 3% per year

ACTION LEVEL 15 ppb

>10-15
ppb

Tap Sampling: Standard monitoring every year
CCT: Conduct new CCT study or re-optimize treatment
LSLR: Full replacement at defined goal rate

TRIGGER LEVEL >10 ppb

0-10
ppb

Tap Sampling: Reduced monitoring every 3 years*
CCT: Maintain treatment and WQPs
LSLR: Voluntary

90th Percentile Requirements

Sample Frequency

2x per year

Reduce Frequency can be requested:

- 1x per year if 90% of samples are $< 15 \mu\text{g/L}$ but $> 10 \mu\text{g/L}$
- 1x ever 3 years if 90% of samples are $< 10 \mu\text{g/L}$

Improving Lead Sampling to Better Protect Public Health

EPA's Revisions to the Lead and Copper Rule

EPA's new rule:

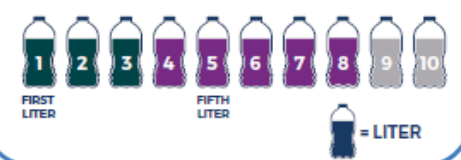
1. Targets water that's actually from the lead service lines, not just the faucet or premise plumbing
2. Targets where the highest levels of lead are to identify problems sooner
3. Leads to more lead service line replacements and improved treatment to reduce lead
4. Better protects public health



PREMISE PLUMBING
SERVICE LINE
WATER MAIN

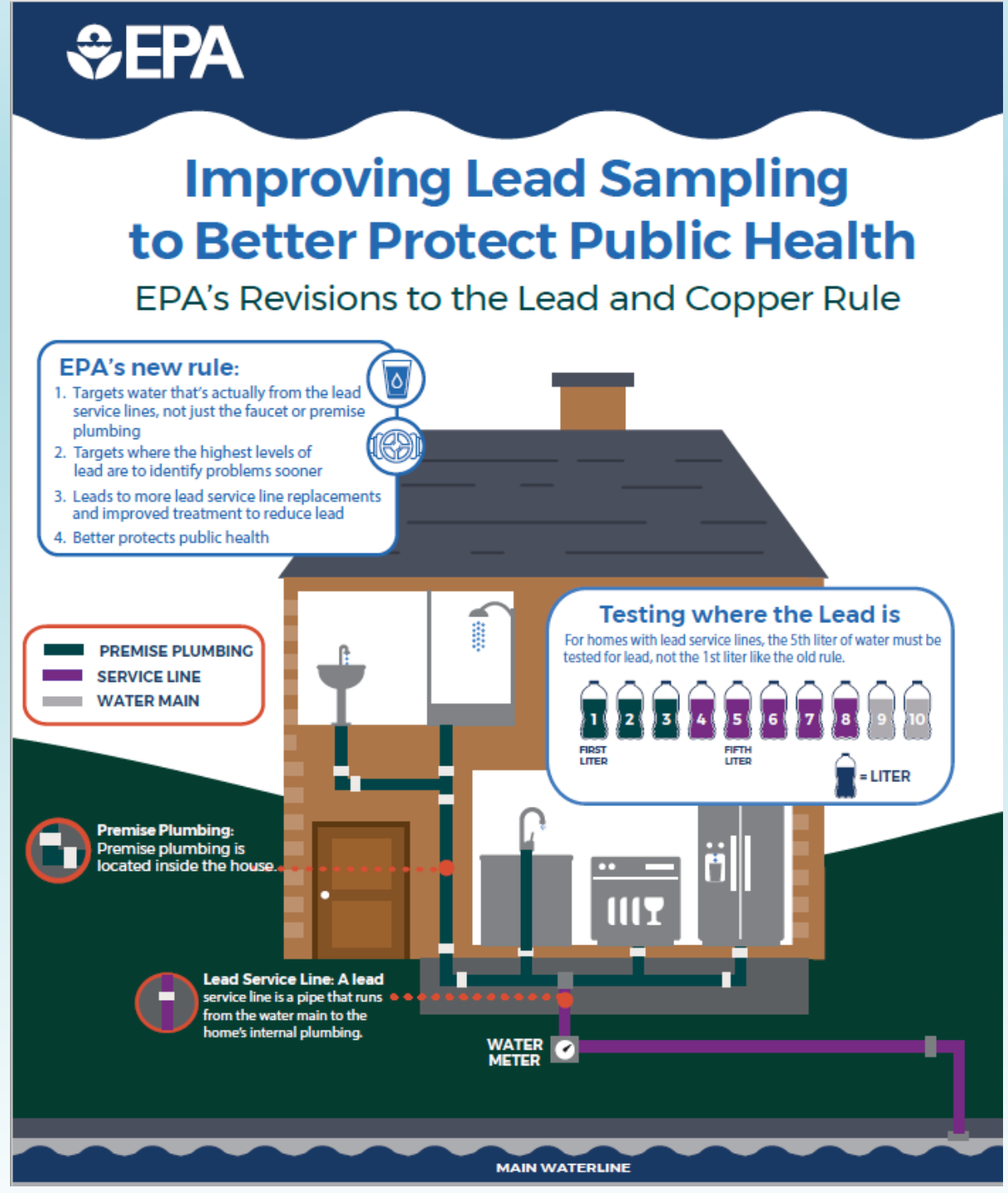
Testing where the Lead is

For homes with lead service lines, the 5th liter of water must be tested for lead, not the 1st liter like the old rule.



Premise Plumbing: Premise plumbing is located inside the house.

Lead Service Line: A lead service line is a pipe that runs from the water main to the home's internal plumbing.



Corrosion Control Water Treatment

- Orthophosphate inhibitor
- **Treatment addition required** if 90% of samples are $> 15 \mu\text{g/L}$
- **Treatment study** must be completed if 90% of samples are < 15 but $> 10 \mu\text{g/L}$
- No treatment changes required if 90% of samples are $> 10 \mu\text{g/L}$



Lead Service Line Replacement

- Replace 3% per year if 90 % of Samples > **15 $\mu\text{g}/\text{L}$**
- Replace a lower % if 90% of samples are < 15 but > **10 $\mu\text{g}/\text{L}$**
- No treatment changes required if 90% of samples are > **10 $\mu\text{g}/\text{L}$**



Schools

Child Care

Starting in 2025 for the first 5 years:

- Primary Schools
- High Schools by request
- Licensed Child Care facilities
- Minimum 20% per year
- 5 locations, focus on water fountains and food prep areas
- Results reported within 30 days
- Excludes plumbing installed after January 1, 2014.



Public Education Outreach

- Tell customers how to access:
 - LSL inventory a
 - Sampling results (CCR).
- If lead sample is higher than 15 ppb, notify direct customers within 24 hours.
- Inform consumers annually that they are served by LSL or lead status unknown service line.
- Encourage Participation in the Lead Service Line Replacement program.
- Updated health effects language in Consumer Confidence Report.
- Must be translated in other languages upon request.

Schedule

- Rule Revision effective December 2021
- 3 years to complete
 - Lead Service Line inventory
 - Lead Service Line Replacement Plan
 - Planning to test schools and child care facilities
 - Public Education and Outreach
- Starting in 2025
 - Increased Sampling and Reporting Requirements