



Reference Guide for Public Water Systems Lead and Copper Rule Proposal Comparison

EPA’s proposed Lead and Copper Rule (LCR) includes a suite of actions to reduce lead exposure in drinking water where it is needed the most. The proposed rule will identify the most at-risk communities and ensure systems have plans in place to rapidly respond by taking actions to reduce elevated levels of lead in drinking water. For more information on the proposed rule, please visit: www.epa.gov/safewater/LCRproposal

The following table compares the major differences between the current Lead and Copper Rule (LCR) and proposed Lead and Copper Rule revisions (LCRR). In general, requirements that are unchanged are not listed. For existing rule requirements please visit: <https://www.epa.gov/dwreginfo/lead-and-copper-rule>

| CURRENT LCR | PROPOSED LCRR |
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| <i>Action Level (AL) and Trigger Level (TL)</i> | |
| <ul style="list-style-type: none"> 90th percentile (P90) level above lead AL of 15 µg/L or copper AL of 1.3 mg/L requires additional actions. | <ul style="list-style-type: none"> 90th percentile (P90) level above lead AL of 15 µg/L or copper AL of 1.3 mg/L requires more actions than the current rule. Defines trigger level (TL) of P90 > 10 and ≤15 µg/L that triggers additional planning, monitoring, and treatment requirements. |
| <i>Lead and Copper Tap Monitoring</i> | |
| <p>Sample Site Selection</p> <ul style="list-style-type: none"> Prioritizes collection of samples from sites with sources of lead in contact with drinking water. Highest priority given to sites served by copper pipes with lead solder installed after 1982 but before the ban on lead pipes and/or lead service lines (LSLs). Systems must collect 50% of samples from LSLs, if available. | <p>Sample Site Selection</p> <ul style="list-style-type: none"> Changes priorities for collection of samples with a greater focus on lead service lines. Prioritizes collecting samples from sites served by LSLs. No distinction in prioritization of copper pipes with lead solder by installation date. Systems must collect all samples from sites served by LSLs, if available. |
| <p>Collection Procedure</p> <ul style="list-style-type: none"> Requires collection of a one-liter sample after water has sat stagnant for a minimum of 6 hours. | <p>Collection Procedure</p> <ul style="list-style-type: none"> Adds requirement that samples must be collected in wide-mouth bottles. Prohibits sampling instructions that include recommendations for aerator cleaning/removal and pre-stagnation flushing prior to sample collection. |

| CURRENT LCR | PROPOSED LCRR |
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| <p>Monitoring Frequency</p> <ul style="list-style-type: none"> • Samples are analyzed for both lead and copper. • Systems must collect standard number of samples based on population semi-annually unless they qualify for reduced monitoring. • Systems can qualify for annual or triennial monitoring at reduced number of sites. Schedule based on number of consecutive years meeting the following criteria: <ul style="list-style-type: none"> ○ Serves $\leq 50,000$ people and \leq lead & copper ALs. ○ Serves any population size, meets State-specified optimal water quality parameters (OWQPs), and \leq lead AL. • Triennial monitoring also applies to any system with P90 and copper 90th percentile levels ≤ 0.005 mg/L and ≤ 0.65 mg/L, respectively, for 2 consecutive 6-month monitoring periods. • 9-year monitoring waiver available to systems serving $\leq 3,300$. | <p>Monitoring Frequency</p> <ul style="list-style-type: none"> • Some samples may be analyzed for lead only when lead monitoring is conducted more frequently than copper. • Copper follows the same criteria as the current rule. • Lead monitoring schedule is based on P90 level for all systems as follows: <ul style="list-style-type: none"> ○ P90 > 15 $\mu\text{g/L}$: Semi-annually at the standard number of sites. ○ P90 > 10 to 15 $\mu\text{g/L}$: Annually at the standard number of sites. ○ P90 ≤ 10 $\mu\text{g/L}$: <ul style="list-style-type: none"> ▪ Annually and triennially at reduced number of sites using same criteria as current rule except copper 90th percentile level is not considered. ▪ Every 9 years based on current rule requirements for a 9-year monitoring waiver. |
| Corrosion Control Treatment (CCT) and Water Quality Parameters (WQPs) | |
| <p>CCT</p> <ul style="list-style-type: none"> • Systems serving $> 50,000$ people were required to install treatment by January 1, 1997 with limited exception. • Systems serving $\leq 50,000$ that exceed lead and/or copper AL are subject to CCT requirements (e.g., CCT recommendation, study if required by Primacy Agency, CCT installation). Can discontinue CCT steps if no longer exceed both ALs for two consecutive 6-month monitoring periods. • Systems must operate CCT to meet any Primacy Agency-designated OWQPs that define optimal CCT. • There is no requirement for systems to re-optimize. | <p>CCT</p> <ul style="list-style-type: none"> • Specifies CCT requirements for systems with P90 level > 10 to ≤ 15 $\mu\text{g/L}$: <ul style="list-style-type: none"> ○ No CCT: must conduct a CCT study if required by Primacy Agency. ○ With CCT: must follow the steps for re-optimizing CCT, as specified in the rule. • Systems with P90 level > 15 $\mu\text{g/L}$: <ul style="list-style-type: none"> ○ No CCT: must complete CCT installation regardless of their subsequent P90 levels. ○ With CCT: must re-optimize CCT. • Community water systems (CWSs) serving $\leq 10,000$ people and non-transient water systems (NTNCWSs) can select an option other than CCT to address lead. <i>See Small System Flexibility.</i> |
| <p>CCT Options: Includes alkalinity and pH adjustment, calcium hardness adjustment, and phosphate or silicate-based corrosion inhibitor.</p> | <p>CCT Options: Removes calcium hardness as an option and specifies any phosphate inhibitor must be orthophosphate.</p> |

| CURRENT LCR | PROPOSED LCRR |
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| <p>Regulated WQPs:</p> <ul style="list-style-type: none"> • No CCT: pH, alkalinity, calcium, conductivity, temperature, orthophosphate (if phosphate-based inhibitor is used), silica (if silica-based inhibitor is used). • With CCT: pH, alkalinity, and based on type of CCT either orthophosphate, silica, or calcium. | <p>Regulated WQPs:</p> <ul style="list-style-type: none"> • Eliminates WQPs related to calcium hardness (i.e., calcium, conductivity, and temperature). |
| <p>WQP Monitoring</p> <ul style="list-style-type: none"> • Systems serving $\geq 50,000$ people must conduct regular WQP monitoring at entry points and within the distribution system. • Systems serving $\leq 50,000$ people conduct monitoring only in those periods $>$ lead or copper AL. • Contains provisions to sample at reduced number of sites in distribution system less frequency for all systems meeting their OWQPs. | <p>WQP Monitoring</p> <ul style="list-style-type: none"> • Systems serving $\geq 50,000$ people must conduct regular WQP monitoring at entry points and within the distribution system. • Systems serving $\leq 50,000$ people must continue WQP monitoring until they no longer $>$ lead and/or copper AL for two consecutive 6-month monitoring periods. • To qualify for reduced WQP distribution monitoring, P90 must be $\leq 10 \mu\text{g/L}$ and the system must meet its OWQPs. |
| <p>Sanitary Survey Review:</p> <ul style="list-style-type: none"> • Treatment must be reviewed during sanitary surveys, no specific requirement to assess CCT or WQPs. | <p>Sanitary Survey Review:</p> <ul style="list-style-type: none"> • CCT and WQP data must be reviewed during sanitary surveys against most recent CCT guidance issued by EPA. |
| <p>Find and Fix: No required follow-up samples or additional actions if an individual sample exceeds $15 \mu\text{g/L}$.</p> | <p>Find and Fix: If individual tap sample $> 15 \mu\text{g/L}$, systems must:</p> <ul style="list-style-type: none"> • Collect a follow-up sample at each location $> 15 \mu\text{g/L}$. • Conduct WQP monitoring at or near the site $> 15 \mu\text{g/L}$. • Perform needed corrective action. |
| <i>LSL Inventory and LSLR Plan</i> | |
| <p>Initial LSL Program Activities:</p> <ul style="list-style-type: none"> • Systems were required to complete a materials evaluation by the time of initial sampling. No requirement to update materials evaluation. • No LSLR plan is required. | <p>Initial LSL Program Activities:</p> <ul style="list-style-type: none"> • All systems must develop an LSL inventory or demonstrate absence of LSLs within first 3 years of final rule publication. • LSL inventory must be updated annually. • All systems with known or possible LSLs must develop an LSLR plan. |

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| <p>LSLR:</p> <ul style="list-style-type: none"> • Systems with LSLs with P90 > 15 µg/L after CCT installation must annually replace ≥7% of number of LSLs in their distribution system when the lead action level is first exceeded. • Systems must replace the LSL portion they own and offer to replace the private portion at the owner’s expense. • Full LSLR, partial LSLR, and LSLs with lead sample results ≤15 µg/L (“test-outs”) count toward the 7% replacement rate. • Systems can discontinue LSLR after 2 consecutive 6-month monitoring periods ≤ lead AL. | <p>LSLR:</p> <ul style="list-style-type: none"> • Rule specifies replacement programs based on P90 level for CWSs serving > 10,000 people: <ul style="list-style-type: none"> ○ If P90 > 15 µg/L: Must fully replace 3% of LSLs per year (mandatory replacement) for 4 consecutive 6-month monitoring periods. ○ If P90 > 10 to 15 µg/L: Implement an LSLR program with replacement goals in consultation with the Primacy Agency for 2 consecutive 1-year monitoring periods. • Small CWSs and NTNCWSs that select LSLR as their compliance option must complete LSLR within 15 years if P90 > 15 µg/L. <i>See Small System Flexibility.</i> • Annual LSLR rate is based on number of LSLs when the system first exceeds the action level plus the current number of service lines of unknown materials. • Only full LSLR (both customer-owned and system-owned portion) count toward mandatory rate or goal-based rate. • All systems must replace their portion of an LSL if notified by consumer of private side replacement within 3 months of the private replacement. • Following each LSLR, systems must: <ul style="list-style-type: none"> ○ Provide pitcher filters/cartridges to each customer for 3 months after replacement. Must be provided within 24 hours for full and partial LSLRs. ○ Collect a lead tap sample at locations served by replaced line within 3 to 6 months after replacement. |
| <p>LSL-Related Outreach:</p> <ul style="list-style-type: none"> • When water system plans to replace the portion it owns, it must offer to replace customer-owned portion at owner’s expense. • If system replaces its portion only: <ul style="list-style-type: none"> ○ Provide notification to affected residences within 45 days prior to replacement on possible elevated short-term lead levels and measures to minimize exposure. | <p>LSL-Related Outreach:</p> <ul style="list-style-type: none"> • Inform consumers annually that they are served by LSL or service line of unknown material. • Systems subject to goal-based program must: <ul style="list-style-type: none"> ○ Conduct targeted outreach that encourages consumers with LSLs to participate in the LSLR program. ○ Conduct an additional outreach activity if they fail to meet their goal. |

| CURRENT LCR | PROPOSED LCRR |
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| <ul style="list-style-type: none"> ○ Include offer to collect lead tap sample within 72 hours of replacement. ○ Provide test results within 3 business days after receiving results. | <ul style="list-style-type: none"> ● Systems subject to mandatory LSLR include information on LSLR program in public education (PE) materials that are provided in response to P90 > AL. |
| <i>Small System Flexibility</i> | |
| <p>No provisions for systems to elect an alternative treatment approach but sets specific requirements for CCT and LSLR.</p> | <p>Allows CWSs serving $\leq 10,000$ people and all NTNCWSs with P90 > 10 $\mu\text{g/L}$ to elect their approach to address lead levels at P90 > 15 $\mu\text{g/L}$ with Primacy Agency approval:</p> <ul style="list-style-type: none"> ● Systems can choose CCT, LSLR, or provision and maintenance of point-of-use devices. ● NTNCWSs can also elect to replace all lead-bearing materials. |
| <i>Public Education and Outreach</i> | |
| <ul style="list-style-type: none"> ● All CWSs must provide education material in the annual Consumer Confidence Report (CCR). ● Systems with P90 > AL must provide public education and outreach (PE) to customers about lead sources, health effects, measures to reduce lead exposure, and additional information sources. ● Systems must provide lead consumer notice to individuals served at tested taps within 30 days of learning results. | <ul style="list-style-type: none"> ● CWSs must provide updated health effects language and information regarding LSLR program in the CCR. ● If P90 > AL: <ul style="list-style-type: none"> ○ Current PE requirements apply. ○ Systems must notify customers of P90 > AL within 24 hours. ● In addition, CWSs must: <ul style="list-style-type: none"> ○ Improve public access to lead information including LSL locations and respond to requests for LSL information. ○ Deliver notice and educational materials to customers during water-related work that could disturb LSLs. ○ Provide increased information to healthcare providers. ○ Provide lead consumer notice to customers whose individual tap sample is > 15 $\mu\text{g/L}$ within 24 hours. ● <i>Also see LSL-Related Outreach in LSLR section of table.</i> |
| <i>Change in Source or Treatment</i> | |
| <p>Systems on a reduced tap monitoring schedule must obtain prior Primacy Agency approval before changing their source or treatment.</p> | <p>Systems on any tap monitoring schedule must obtain prior Primacy Agency approval before changing their source or treatment.</p> |
| <i>Source Water Monitoring and Treatment</i> | |

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| <ul style="list-style-type: none"> • Periodic source water monitoring is required for systems with: <ul style="list-style-type: none"> ○ Source water treatment; or ○ P90 > AL and no source water treatment. | <ul style="list-style-type: none"> • Primacy Agencies can waive continued source water monitoring if the: <ul style="list-style-type: none"> ○ System has already conducted source water monitoring for a previous P90 > AL; ○ Primacy Agency has determined that source water treatment is not required; <i>and</i> ○ System has not added any new water sources. |
| Lead in Drinking Water at Schools and Child Care Facilities | |
| <ul style="list-style-type: none"> • Does not include separate testing and education program for CWSs at schools and child care facilities. • Schools and child cares that are classified as NTNCWSs must sample for lead and copper. | <ul style="list-style-type: none"> • CWSs must conduct lead in drinking water testing and PE at 20% of K-12 schools and licensed child cares in service area every year. • Sample results and PE must be provided to each sampled school/child care, Primacy Agency and local or State health department. • Excludes facilities built after January 1, 2014. |
| Primacy Agency Reporting | |
| <p>Primacy Agencies must report information to EPA that includes but is not limited to:</p> <ul style="list-style-type: none"> • All P90 levels for systems serving > 3,300 people, and only levels > 15 µg/L for smaller systems. • Systems that are required to initiate LSLR and the date replacement must begin. • Systems for which optimal corrosion control treatment (OCCT) has been designated. | <p>Expands current requirements to include:</p> <ul style="list-style-type: none"> • All P90 values for all system sizes. • The current number of LSLs and service lines of unknown material for every water system. • OCCT status of all systems including Primacy Agency-specified OWQPs. |



LCR Proposal Summary and Key Improvements

EPA's proposed Lead and Copper Rule (LCR) includes a suite of actions to reduce lead exposure in drinking water where it is needed the most. The proposed rule will identify the most at-risk communities and ensure systems have plans in place to rapidly respond by taking actions to reduce elevated levels of lead in drinking water.

The proposed LCR maintains the current Maximum Contaminant Level Goal (MCLG) of zero and the Action Level of 15 ppb. The proposed rule will require a more comprehensive response at the action level and introduces a trigger level of 10 ppb that requires more proactive planning in communities with lead service lines.

The agency's proposal therefore takes a proactive and holistic approach to improving the current rule—from testing to treatment to telling the public about the levels and risks of lead in drinking water. This approach focuses on six key areas provided below.

1: IDENTIFYING AREAS MOST IMPACTED

To help identify areas with the greatest potential for lead contamination of drinking water, the EPA is proposing that all water systems prepare and update a lead service line (LSL) inventory. To reduce high levels of lead in certain locations, the EPA is proposing to require water systems to "find-and-fix" the causes of these elevated levels.

Key Improvements:

- The EPA will for the first time require a public lead service line inventory.
- Unlike now, systems will have to pay attention to individual locations with elevated levels of lead by identifying the cause and mitigating the problem.

Under the Current LCR:

- Systems are only required to conduct a materials inventory for the purposes of identifying enough sites for tap sampling. These inventories are not of the entire system, nor are they public.
- Systems must only take action if more than 10% of tap samples are greater than the action level (15 ppb). There are no requirements for systems to take follow-up samples at sites with individual tap samples greater than 15 ppb.

2: STRENGTHENING TREATMENT REQUIREMENTS

The EPA is proposing to revise requirements for corrosion control treatment (CCT) based on tap sampling results. The EPA's proposal also establishes a new trigger level of 10 ppb. At this trigger level, systems that currently treat for corrosion would be required to re-optimize their existing treatment. Systems that do not currently treat for corrosion would be required to conduct a corrosion control study so that the system is prepared to respond quickly when necessary.

Key Improvements:

- Based on sampling results, systems with elevated lead levels will reevaluate their existing corrosion control treatment or conduct a treatment study so that they are prepared to respond quickly when necessary.

Under the Current LCR:

- Requirements are based primarily on system size. Systems serving > 50,000 persons are required to have CCT while systems serving \leq 50,000 have CCT requirements after an action level exceedance and may discontinue these requirements if the action level no longer exceeded for two 6-month monitoring periods.
- Systems are not required to re-optimize their CCT, unless directed to do so by the state, and may only be required to conduct a CCT study when there is an action level exceedance.

3: REPLACING LEAD SERVICE LINES

The EPA is proposing to require water systems to replace the water system-owned portion of an LSL when a customer chooses to replace their customer-owned portion of the line. The EPA is also proposing to require water systems to conduct outreach and initiate lead service line replacement programs when lead levels are above the proposed trigger level of 10 ppb. The proposal requires systems that are above 10 ppb but at or below 15 ppb to work with their state to set an annual goal for replacement. Systems that are above 15 ppb will be required to replace a minimum of three percent of the number of LSLs annually. The proposal also prevents systems from avoiding lead service line replacements (LSLR) by "testing out" through sampling. Additionally, small systems that exceed the trigger and action levels will have flexibility with respect to treatment and lead service line replacement actions.

Key Improvements:

- The trigger level is a new flexible provision designed to compel water systems to take proactive, tailored actions to plan upgrades to aging infrastructure and reduce levels of lead in drinking water.
- Systems above 10 parts per billion would be required to work with their state to set an annual goal for replacing lead service lines. Water systems above 15 parts per billion would be required to fully replace a minimum of three percent of the number of known or potential lead service lines annually.
- Importantly, the proposal prohibits "test-outs" to avoid replacing lead service lines – an allowed practice under the current rule that has significantly slowed national progress in removing this significant source of lead from our homes.
- Partial lead service line replacements will no longer be allowed except in certain situations (e.g., emergency repair) because science has recently shown us that partial lead service line replacement may increase short-term lead exposure.
- Flexibility is important for small systems so that they can protect public health by taking the action that makes sense for their community.

Under the Current LCR:

- Water systems are not required to replace their portion of an LSL when the customer-owned portion of the line is being replaced.
- No LSLR plan is required. Systems are only required to implement an LSLR program when the lead action level of 15 ppb is exceeded.
- Systems can count partial LSLRs and LSLs that have been tested out (i.e., samples from the LSL do not exceed 15ppb) as replaced to meet the 7% mandatory annual replacement rate.



EPA's proposed Lead and Copper Rule has **sensible approaches to protect children from lead in drinking water**. By providing flexibility for small systems, the rule allows systems to protect public health by taking **common sense actions**.

4: INCREASING SAMPLING RELIABILITY

The EPA is proposing to improve tap sampling procedures. For example, requiring wide-mouth bottles for collection and prohibiting flushing and cleaning or removing faucet aerators before sampling. The EPA is also changing the criteria for selecting homes where samples are taken to require sampling in homes with lead service lines. And, systems with higher levels of lead will sample more frequently.

Key Improvements:

- Water systems will follow new, improved sampling procedures, will adjust sampling sites to better target locations with higher lead levels, and systems with higher levels will sample more frequently.

Under the Current LCR:

- Systems are not prohibited from instructing samplers to flush before sampling, remove and/or clean faucet aerators, and use narrow-necked collection bottles, all of which could mask elevated lead levels.
- Systems with LSLs are only required to collect 50% of tap samples from sites served by LSLs, which could obscure problems in the system.

5: IMPROVING RISK COMMUNICATION

The EPA is proposing to require systems to notify customers of an action level exceedance within 24 hours. The EPA is also proposing to require that systems make the LSL inventory publicly available and conduct regular outreach to homeowners with LSLs.

Key Improvements:

- Homeowners will learn about elevated levels of lead in their system sooner. They will also understand where lead services lines are in their community and how to protect their family from exposure to lead.

Under the Current LCR:

- Customers are notified of their tap sampling results, regardless of whether there is an action level exceedance, within 30 days of the system receiving the results.
- A materials evaluation is only required for sites used for tap monitoring and is not public. Water systems are not required to inform customers if they have a known or potential LSL.

6: PROTECTING CHILDREN IN SCHOOLS

Since children are most at risk, the EPA is proposing that community water systems (CWS) sample drinking water outlets at each school and each child care facility served by the system. The system would be required to provide the results and information about the actions the school or child care facility can take to reduce lead in drinking water.

Key Improvements:

- For the first time, systems will be required to test school and child care facilities.

Under the Current LCR:

- Community water systems are not currently required to test schools and child care facilities. Only schools and child care facilities classified as Non-Transient Non-Community Water Systems must sample for lead and copper.



For more information, visit:
epa.gov/safewater/LCRproposal

A close-up photograph of a chrome faucet with water flowing out, set against a background of blue water droplets.

Understanding the Lead and Copper Rule

EPA established the Lead and Copper Rule (LCR) in 1991 to protect public health and reduce exposure to lead in drinking water. The most common sources of lead in drinking water are lead pipes and brass or bronze faucets and fixtures.

MAXIMUM CONTAMINANT LEVEL GOAL

The Lead and Copper Rule established a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is zero because there is no level of exposure to lead that is without risk. The Safe Drinking Water Act requires that EPA establish a treatment technique for contaminants like lead and copper that prevents known or anticipated health effects to the extent feasible.

Since implementation, the **Lead and Copper Rule** action level exceedances have decreased by **over 90%**

TREATMENT TECHNIQUE

Lead is not naturally found in water. Lead from lead pipes, faucets, and fixtures can dissolve into water or sometimes can enter as flakes or small particles. To keep lead from entering the water, EPA requires some systems, including those that are having difficulty controlling lead, to treat water using certain chemicals that keep the lead in place by reducing corrosion. This treatment is called corrosion control. When corrosion control alone is not sufficient to control lead exposure, EPA requires systems to educate the public about risks of lead in drinking water and to replace lead service lines.

EPA'S LEAD ACTION LEVEL

The lead action level is a measure of the effectiveness of the corrosion control treatment in water systems. The action level is not a standard for establishing a safe level of lead in a home.

To check if corrosion control is working, EPA requires water systems to test for lead at the tap in certain homes, including those with lead service lines. Systems compare sample results from homes to EPA's action level of 0.015 mg/L (15 ppb). If 10 percent of the samples from these homes have water concentrations that are greater than the action level, then the system must perform actions such as public education and lead service line replacement.

LCR VIOLATIONS

Exceeding the action level is not a violation. Violations can be assessed if a system does not perform certain required actions (e.g., public education or lead service line replacement) after the action level is exceeded. Other violations may also be assessed under the rule. For example, if samples are collected improperly, samples are not reported, or if treatment is done incorrectly.



IMPLEMENTATION AND NEXT STEPS

Implementation of the LCR over the past twenty-five years has resulted in major improvements in public health. The number of the nation's large drinking water systems that have exceeded the LCR action level has decreased by over 90 percent since the initial implementation of the rule. Based on June 2019 SDWIS data, about 97 percent of the systems have not reported an action level exceedance in the last 3 years.

EPA is continuing to work with primacy agencies to ensure that the LCR is being properly implemented.

EPA has recently released the proposed rule for public comment. To learn more visit: www.epa.gov/safewater/lcrproposal.



For more information, visit: epa.gov/safewater



Accelerating the Removal of America's Lead Pipes

EPA's Proposed Updates to the Lead and Copper Rule

Summary: On October 10, 2019, the Environmental Protection Agency (EPA) took historic action by proposing significant improvements to the Lead and Copper Rule (LCR) that would reduce lead in the nation's drinking water. One of the most significant improvements to the current rule addresses the requirements for lead service line replacement. The existing rule's 7% replacement rate is rarely occurring due to weaknesses in the current rule.

The improvements outlined below would result in a 3-to 30-fold increase in lead service line replacement investments by closing these loopholes, propelling early action, and strengthening replacement requirements. Through the proposal's set of interrelated actions that work together combined with its transparency and outreach requirements, it will increase the current rate of lead service line replacements and better protect America's families and children.

EPA's LCR proposal will result in more lead service lines replacements through the following improvements to the current rule:

For Large Community Water Systems (serving <10,000 customers)

1. Lead Service Line (LSL) removal begins sooner.

- Systems start removing LSL at 10 part per billions (ppb) versus 15 ppb.
- Systems will begin replacements based on a goal set with their state at >10 ppb and < 15 ppb.

2. More stringent sampling will identify more LSLs sooner.

- Systems with levels above 10 ppb will monitor more frequently, at more targeted sampling sites, and using improved sampling procedures that will better find the high lead levels that compel replacement.
- At >10 ppb systems will monitor annually or semi-annually at the standard number of sites (no reduced monitoring at >10 ppb).
- All samples must be taken at homes with LSL, likely to have higher levels of lead.
- Common sampling procedures used to lower the lead in samples will be prohibited. For example, cleaning faucet aerators of lead particles prior to sampling.

3. Systems must replace the entire lead service line.

- Partial lead service line replacements will not meet the proposal requirements.
- Water systems must replace the water system-owned portion of an LSL when a customer chooses to replace their customer-owned portion of the line.

4. Systems will no longer be able to "test out" lines.

- The current rule allows system to count the line as replaced towards their 7% removal if a sample taken from an individual line is below 15 ppb — even when no replacement construction has occurred.
- The proposed rule removes this provision.

5. Systems will no longer be able to avoid or quickly stop removal.

- Currently, water systems can stop the 7% removal of lead service lines if after one year or less once they are below the action level.
- The proposed rule requires water systems that fall under the rule's mandatory 3% replacement program to have lead levels less than the 15ppb action level for two years prior to ending its replacement program.

6. Neighborhoods will know where their LSLs are located.

- Water systems must make their LSL inventory publicly available, so people know about the LSLs in their neighborhood which could compel local action.

7. Customers with an LSL will know they have an LSL.

- Systems must notify occupants of homes with LSL every year about the presence of their LSL.
- Systems will also be required to provide information about options for mitigating risk, including removing the LSL.

For Small Community Water Systems (serving <10,000 customers)

8. Smaller systems that remove LSL will have a specific timeframe for removal.

- Small water systems that select LSL replacement as their compliance option would have to replace LSLs on a schedule not to exceed 15 years if they exceed the action level.
- The current rule does not provide a specific timeframe.