



LCR/LCRR/LCRI:

How do utilities
manage compliance?

Agenda

- Compliance timeline
- Rule Comparisions



Timeline - LCRR Compliance



DEC. 16, 2021

Effective Date

OCT. 16, 2024

Compliance Date

- List of schools & licensed childcare facilities
- Inventory must be publicly available
- Submit & Certify:
 - Service Line Inventory
 - LSL Replacement Plan

2025

Compliance tap sampling begins

Submit to the State:

- Tap sample sites list
- WQP sites (if required)
- Copy of tap sampling instructions for customers

Timeline - LCRI Compliance

A horizontal timeline line with three circular markers, each corresponding to a milestone below it.

DEC. 16, 2023

Draft rule
published in
Federal Register

FEB. 5, 2024

Public comments
due to EPA

2025

Compliance tap
sampling begins

Submit to the TCEQ:

- Tap sample sites list
- WQP sites (if required)
- Copy of tap sampling instructions for customers

An underwater scene with several fish swimming in clear blue water. In the foreground, there are large, textured coral structures. The lighting is bright, creating a serene and natural atmosphere.

Rule Comparisons

Inventory

LCR	LCRR	LCRI
<ul style="list-style-type: none"> • Complete a materials evaluation for initial sampling 	<ul style="list-style-type: none"> • Develop initial LSL inventory • Must include a location identifier for each LSL and GRR service line • Inventory must be publicly accessible • Available online for systems serving >50,000 people • Must update based on tap sampling frequency but no more than annually 	<ul style="list-style-type: none"> • Include lead connectors in inventory • Include street address with each service line and connector • Updated annually • Respond to customer inquiry regarding incorrect material categorization within 60 days • Validate the accuracy of the non-lead services within 7 years • ID all unknown service lines by mandatory replacement deadline

Replacement Plan

LCR	LCRR	LCRI
<ul style="list-style-type: none"> No requirement 	<ul style="list-style-type: none"> Develop an LSLR plan if at least one lead, GRR, or unknown service line Plan must include LSLR prioritization strategy 	<ul style="list-style-type: none"> Develop an LSLR plan if there is at least one lead, GRR, or unknown service line Plan to include: <ol style="list-style-type: none"> strategy to inform customers/consumers about plan and replacement program ID legal provisions that impact a system's ability to conduct full SL replacement Replacement plan must be publicly accessible and online for systems serving >50,000 people

Replacements

LCR	LCRR	LCRI
<ul style="list-style-type: none"> • Based on 90th percentile level • Partial replacements allowed 	<ul style="list-style-type: none"> • Replacement based on 90th percentile for systems serving >10,000 people • Fully replace 3% of LSLs & GRR annually • Annual LSLR rate based on # of LSLs, GRR and unknown when first exceed the trigger or action level • Only full replacement counts • Replace public portion of lead or GRR within 45 days of customer notification of private side replacement; if cannot replace within 45 days, must notify the state and replace the system's portion within 180 days 	<ul style="list-style-type: none"> • Mandatory full service line replacement • Replace all lead and GRR SL "under their control" in 10 years • Allows extra time for systems with large amount of lead and GRR lines • Must replace 10% per year calculated across a rolling 3-year period

Replacements

LCR	LCRR	LCRI
	<ul style="list-style-type: none"> • Make 2 good faith efforts to engage customers about LSLR before it is done • When conducting partial LSLR must offer to replace customer portion of SL • Replace lead connectors when found • After each LSLR, systems must: <ol style="list-style-type: none"> 1. Provide pitcher filters & cartridges to each customer (6 month-supply) 2. Provide pitcher filers & cartridges before line returns to service 3. Collect tap samples within 3 to 6 months after replacement 	<ul style="list-style-type: none"> • Average annual replacement = # LSLs & GRR SL in baseline inventory plus # unknown SL updated annually • Conduct at least 4 attempts using at least 2 different methods to engage property owners about full LSLR, when applicable • Only full LSLR count • Provide filter and offer tap sampling • Replace lead connectors

Replacements

LCR	LCRR	LCRI
		<ul style="list-style-type: none">• Systems conducting partial service line replacement must offer to replace remaining portion of SL not under their control (within 45 days for emergencies)

Tap Monitoring Tiers

LCR	LCRR	LCRI
<ul style="list-style-type: none"> • Prioritize collecting samples from sites with lead • Highest priority: <ol style="list-style-type: none"> 1) sites with copper pipes with lead solder installed after 1982 2) Sites with lead pipes 3) Sites served by LSLs • Collect 50% of samples from LSLs, if available 	<ul style="list-style-type: none"> • Change priority to sites with LSLs • No distinction in prioritization of copper pipes with lead solder • Adds 2 tiers to focus tap sample site selection tier criteria on LSLs first 	<ul style="list-style-type: none"> • Combines the tap sample site selection tier criteria for CWS and NTNCWSs • Revises Tier 3 to include sites served by a lead connector as well as sites served by a GRR

Tap Sampling

LCR	LCRR	LCRI
<ul style="list-style-type: none"> Collect first-liter sample after water sat stagnant for minimum of 6 hours 	<ul style="list-style-type: none"> Collect fifth-liter sample after water sat stagnant for minimum of 6 hours Adds requirement for using wide-mouth bottles Prohibits sampling instructions that include cleaning/removing aerator and pre-stagnation flushing before sample collection. 	<ul style="list-style-type: none"> Collect and analyze 1st- and 5th-liter samples after water sat stagnant for minimum of 6 hours Requires using the higher value of the 1st- and 5th-liter lead concentration in homes Clarifies the definition of a wide-mouth bottle

Water Quality Parameters (WQPs)

LCR	LCRR	LCRI
<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 	<ul style="list-style-type: none"> Eliminates WQPs related to calcium hardness (i.e. calcium, conductivity, and temperature) Any phosphate inhibitor must be orthophosphate All other parameters are same as LCR 	<ul style="list-style-type: none"> No changes from the LCRR

Water Quality Parameters (WQPs)

LCR	LCRR	LCRI
<ul style="list-style-type: none"> Monitoring intervals based on system size Monitoring at entry points & distribution locations Provisions for reduced sample sites if meeting OWQPs 	<ul style="list-style-type: none"> Monitoring intervals based on system size Monitoring entry points and distribution locations To qualify for reduced monitoring, P90 lead level must be ≤ 0.010 mg/L and system must meet its OWQPs 	<ul style="list-style-type: none"> With CCT (unless deemed optimized) serving $\geq 10,000$ people: regular WQP monitoring at entry points and within distribution system Without CCT serving $< 10,000$ people and without CCT serving $\leq 50,000$ people that exceed the lead and/or copper AL(s) conduct WQP monitoring until no longer exceed lead and/or copper AL for 2 consecutive 6-month monitoring periods Without CCT serving $> 10,000$ but $\leq 50,000$ people and exceed lead AL must install CCT & continue WQP monitoring

Find-and-Fix

LCR	LCRR	LCRI
<ul style="list-style-type: none"> No required follow-up samples or additional actions when exceed AL 	<ul style="list-style-type: none"> If individual tap samples > 0.015 mg/L lead: <ol style="list-style-type: none"> WQP monitoring at or near site > 0.015 mg/L Resample at same site within 30 days <ol style="list-style-type: none"> If LSL, collect any liter or sample volume If no LSL, collect 1-liter first draw after stagnation Perform needed correction action Document customer refusal or non-response after 2 attempts Provide information to local and state health officials 	<ul style="list-style-type: none"> Changes the name from “Find-and-Fix” to “Distribution System and Site Assessment” Same LCRR requirements when individual tap samples >0.010 mg/L lead Clarifies that distribution system sample location must be within half-mile radius of each site with a result > 0.010 mg/L

LSLR Outreach

LCR	LCRR	LCRI
<ul style="list-style-type: none">• Offer to replace customer-owned portion (owner's expense) when replacing city-owned portion	<ul style="list-style-type: none">• Notify customers annually if they have lead, GRR, or unknown service line• Systems subject to goal-based program must:<ol style="list-style-type: none">1) Conduct targeted outreach that encourages customer with LSLs to participate in the LSLR program2) Conduct an additional outreach activity if they fail to meet their goal	<ul style="list-style-type: none">• If the system fails to meet the mandatory service line replacement rate, conduct public outreach activities to encourage consumers with lead, GRR, and unknown service lines to participate in the service line replacement program

LSLR Outreach (continued)

LCR	LCRR	LCRI
<ul style="list-style-type: none">• When replacing system portion:<ol style="list-style-type: none">1) Provide notice 45 days before replacing; include measures to reduce exposure2) Offer to collect sample within 72 hours of replacement3) Provide test results within 3 business days after receiving results	<ul style="list-style-type: none">• Systems subject to mandatory LSLR must include information about the LSLR program in public education materials that are provided in response to P90 > action level• Deliver notice and educational material to customer during water-related work that could disturb LSLs	<ul style="list-style-type: none">• Deliver notice and educational material to customer during water related work that could disturb LSLs, including inventorying efforts• Removes goal-based program outreach activities

Outreach – CCR & test results

LCR	LCRR	LCRI
<ul style="list-style-type: none"> • Not addressed in LCR (requirements in CCR rule) • Provide test results to individuals at tested taps within 30 days of learning results 	<ul style="list-style-type: none"> • Revised health effects language must be included • statement on how to access inventory & all tap sampling results • Provide test results ASAP but no later than 3 days after learning result is >0.015 mg/L for lead 	<ul style="list-style-type: none"> • Include updated health effects language • statement on school & childcare sampling • How to access inventory & replacement plan • Provide test results ASAP but no later than 3 days after learning result is >0.015 mg/L for lead

Outreach – Translations

LCR	LCRR	LCRI
<ul style="list-style-type: none">• Translate education materials when serving a large proportion of consumers with limited English	<ul style="list-style-type: none">• Translate education materials when serving a large proportion of consumers with limited English	<ul style="list-style-type: none">• When serving a large proportion of consumers with limited English, all PE materials must include a translated statement on importance of the information and that consumers can contact the system to get the materials translated

Outreach – Other

LCR	LCRR	LCRI
	<ul style="list-style-type: none"> • Provide info to state and local health agencies • Water systems must deliver notice and educational materials to consumers during water-related work that could disturb LSLs 	<ul style="list-style-type: none"> • Include updated mandatory health effects language in all educational materials • Offer lead sampling to any customer with an LSL, GRR, or unknown SL • Deliver notice & educational materials to customer during water related work that could disturb LSLs, including inventorying efforts

Outreach – AL >P90

LCR	LCRR	LCRI
<ul style="list-style-type: none">Public education to customers about lead sources, health effects, measures to reduce lead exposure, and additional information sourcesLead tap sampling to customers who request it	<ul style="list-style-type: none">Tier 1 Public Notice to entire system	<ul style="list-style-type: none">Tier 1 Public Notice to entire systemConduct outreach within 60 days of end of tap sampling period3 AL exceedances in 5 years require additional outreach and making filters available to all customers

Public Notification

LCR	LCRR	LCRI
<ul style="list-style-type: none"> No public notice required if P90 > action level 	<ul style="list-style-type: none"> If P90 > lead action level systems must notify consumers within 24 hours (Tier 1 public notice). Additional requirements include P90 calculation, lead inventory updates, etc. Additional monitoring requirements may apply (§141.86 updated lead health effects through §141.90) 	<ul style="list-style-type: none"> Tier 1 PN requirements if lead AL exceedance. Include updated lead health effects language in public notice Tier 2 PN for §141.80 through §141.84, (except §141.80(c)); §141.85 (a) through (c) and (h); §141.93 Tier 3 PN for §141.86 through §141.90

Source Water

LCR	LCRR	LCRI
<ul style="list-style-type: none"> Systems on a reduced tap monitoring schedule must obtain prior state approval before changing their source or treatment 	<ul style="list-style-type: none"> Systems on any tap monitoring schedule must obtain prior state approval before changing their source or treatment. These systems must also conduct tap monitoring biannually 	<ul style="list-style-type: none"> No changes from the LCRR

Source Water

LCR	LCRR	LCRI
<ul style="list-style-type: none"> • Periodic source water monitoring for lead and copper is required for systems with: <ol style="list-style-type: none"> 1. Source water treatment; or 2. P90 > action level and no source water treatment 	<ul style="list-style-type: none"> • states can waive continued source water monitoring for lead and copper if the: <ol style="list-style-type: none"> 1. System already conducted source water monitoring for previous P90 action level; 2. state has determined that source water treatment is not required; and 3. System has not added any new water sources. 	<ul style="list-style-type: none"> • No changes from the LCRR

Schools and Child Care Facilities

LCR	LCRR	LCRI
<ul style="list-style-type: none"> Does not include testing and education program at schools and child cares Schools and child cares classified as NTNCWSs must sample for lead and copper 	<ul style="list-style-type: none"> Conduct sampling at 20% of elementary schools and 20% percent of child cares per year Conduct sampling at secondary schools on request Conduct sampling on request of all schools and child cares thereafter Samples results and PE must be provided to each sampled school & child care facility, state, and local or state health department Excludes facilities constructed on or after Jan. 1, 2014 Waives schools and child cares sampled under a state or other program after Oct. 16, 2024 	<ul style="list-style-type: none"> Expands LCRR requirements: <ol style="list-style-type: none"> Waivers for sampling in schools & child cares during the first 5-year testing cycle if facility has been sampled between Jan. 1, 2021, and LCRI compliance date Requires statement about opportunity for schools and child cares to be sampled in the CCR Excludes facilities constructed or had full plumbing replacement on or after Jan. 1, 2014

Primacy Agency Reporting

LCR	LCRR	LCRI
<ul style="list-style-type: none">states must report information to EPA that includes, but is not limited to:<ol style="list-style-type: none">All P90 levels for systems serving >3,300 people, and only levels > 0.015 mg/L for smaller systemsSystems required to initiate LSLR & date replacement must begin	<ul style="list-style-type: none">Expands to include:<ol style="list-style-type: none">All P90 values for all systems# of lead, GRR, and unknown SL for every systemGoal-based or mandatory replacement rate & date each system must begin LSLROCCT status of all systems, including OWQPs specified by state	<ul style="list-style-type: none">Revises and expands on LCRR special primacy requirements. states must report information to EPA that includes, but is not limited to:<ol style="list-style-type: none">The current # of lead, GRR, unknown, and non-lead SL and lead connectors in each system's inventory# & types of service lines replaced and replacement rate for every system conducting mandatory LSLR

Primacy Agency Reporting - continued

LCR	LCRR	LCRI
<p>3. Systems for which OCCT has been designated</p>	<p>5. For system triggered into source water treatment, the state-designated date or determination for no treatment required</p>	<p>3. Deadline for the system to complete replacement of all lead and GRR service lines</p> <p>4. Expected date of completion of service line replacement</p> <p>5. The P90 values of systems with an action level exceedance within 15 days of the end of the monitoring period or, if earlier, within 24 hours of receiving the notice from the system</p>

Questions



www.epa.gov/ground-water-and-drinking-water/proposed-lead-and-copper-rule-improvements



Thank you

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