

LCRR & LCRI Updates

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DISCLAIMER – This presentation includes description of statutory and regulatory requirements applicable to water systems. Although HDOH has made every effort to ensure the accuracy of the contents, the legally binding requirements applicable to public water systems are determined by statutes and regulations. In the event of a conflict between this guidance and any applicable statute or regulation, this guidance would not be controlling. This guidance is not a regulation itself, nor does it change or substitute for those provisions and regulations. This guidance does not confer legal rights or impose legal obligation upon any member of the public, state, or public water system.

LCRR/LCRI Timeline

Jan 2021	• LCRR Promulgated
Dec 2023	• LCRI Proposed
Feb 2024	• LCRI Public Comment Period End
Oct 8, 2024	• EPA issued LCRI Final Rule
Oct 16, 2024	• LCRR Compliance Date
Oct 30, 2024	• Scheduled LCRI Promulgation Date
Late 2027	• LCRI Proposed Compliance Date*

*EPA proposed a compliance date of **three years** after the promulgation of the final rule and for systems to continue to comply with the LCR until that date, with some exceptions.

LCRR COMPLIANCE DEADLINE

The following requirements were effective as of October 16, 2024!



Initial Service Line Inventory



Public Education

Initial and annual notification of known or potential LSL



Public Notification

Tier 1 PN for lead action level exceedances

Initial Service Line Inventory – Due October 16, 2024

Lead Service Lines

Lead Status Unknown

Galvanized Lines Requiring Replacement

- Galvanized service lines that are/were downstream from a lead pipe

Non-lead Service Line

- Copper, plastic, etc
- It is recommended that the actual service line material is included in the inventory, if possible.



****ALL service lines, including fire suppression and irrigation service lines, are required to be included.****

Tier 1 Public Notice – Effective October 16, 2024

- PWSs that exceed the **lead action level** are required to provide PN as soon as practical but no later than 24 hours after learning of the lead ALE.
- The lead AL will change to **10 ppb** in late 2027 (NEW!!).
- A new template is available on EPA website (<https://www.epa.gov/dwreginfo/lead-and-copper-rule-implementation-tools>).
- A copy of PN should be sent to EPA (leadALE@epa.gov) and DOH within 24 hours.
- Certification of delivery is due within 10 days of completing the Tier 1 PN.

Notification of Lead or Potential Lead Service Line – Effective October 16, 2024



- Inventories should be publicly accessible by now (due October 16, 2024).
- Notice to customers whose service connections are lead, galvanized requiring replacement, or unknown.
 - Due within 30 days after the completion of inventory (**November 15, 2024**).
 - Template is available on EPA website.
- PWS should provide the notification at the initiation of service for new customers.
- PWS should repeat notification on an annual basis until entire PWS has no more lead, GRR, and unknown.
 - Certification of delivery and a copy of notification are due annually by July 1 for the previous calendar year.

What if I only have non-lead service lines?

- Two options to meet publicly accessible requirement (due October 16, 2024):
 1. Make inventory publicly available.
 2. Provide a written statement that your system has no lead, GRR, or unknown service lines, and a general description of methods used to make the determination.
- Effective late 2027, if an LSL or GRR was later discovered,
 - Notify DOH within 60 days of discovery, and
 - Prepare an updated inventory on a schedule established by DOH.

Examples of Non-Lead Materials



Plastic



Copper



Galvanized pipe*

*Only if the galvanized pipe was determined to have never been downstream of an LSL



Now what?

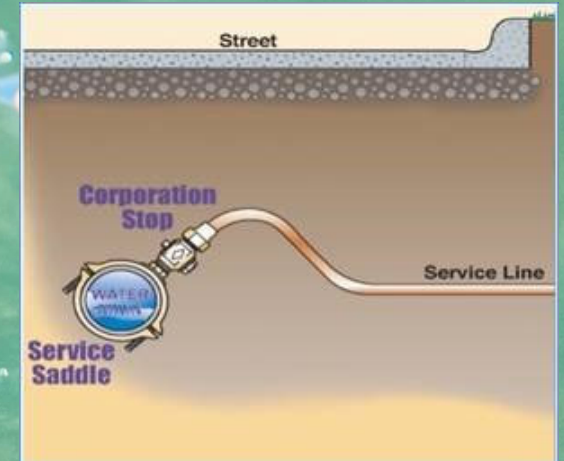
Baseline Inventory – Due Late 2027

Lead
Connector

Unknown
Connector

No Connector
Present

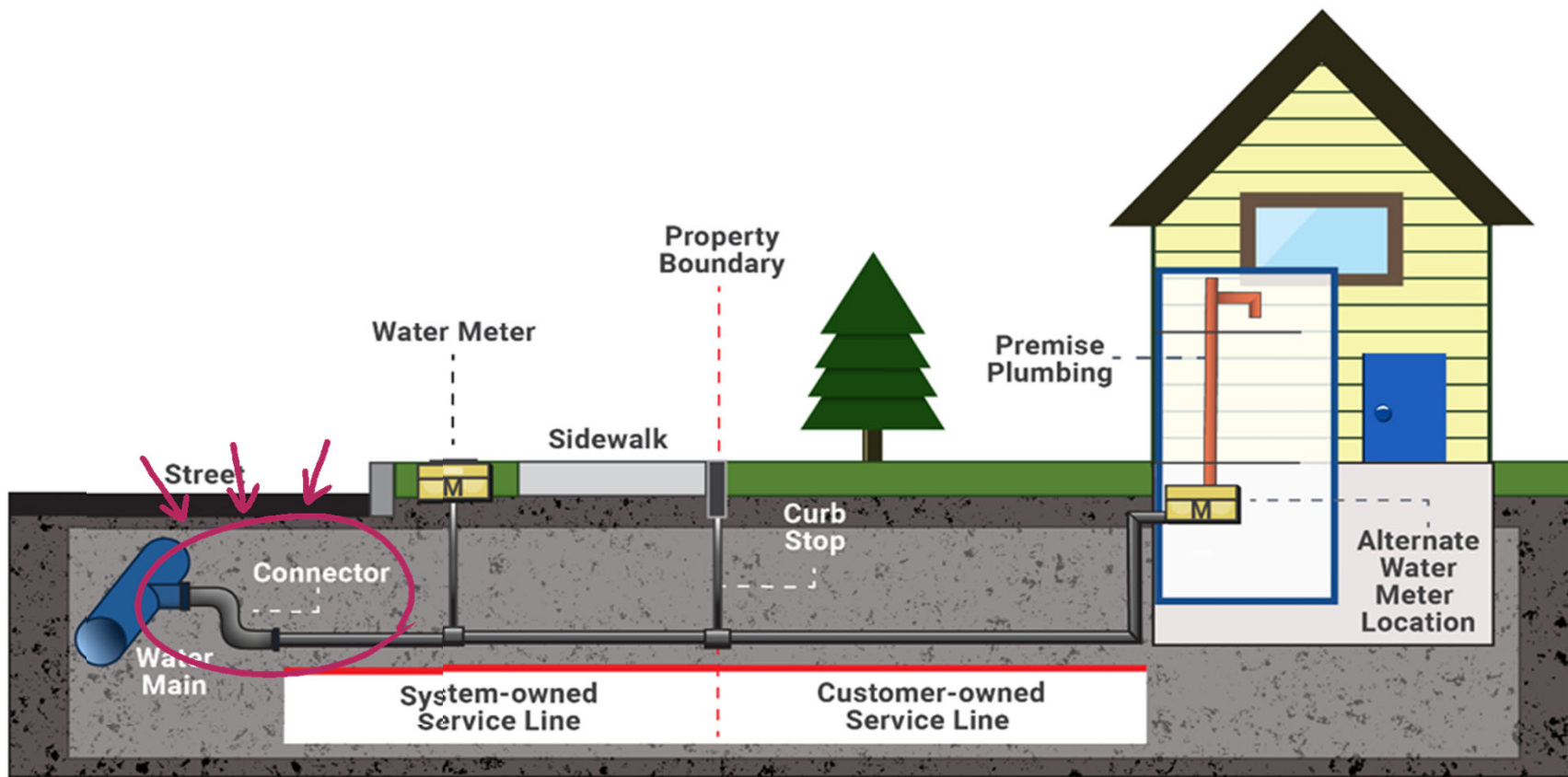
Non-Lead
Connector



Source: Louisiana Department of
Health

Connector, also referred to as a gooseneck or pigtail, means a short segment of piping not exceeding three feet that can be bent and is used for connections between service piping, typically connecting the service line to the main. For purposes of subpart I, lead connectors are not considered to be part of the service line.

Baseline Inventory – Due Late 2027



Source: EPA Guidance

Baseline Inventory – Due Late 2027

- The Baseline Inventory (and subsequent updated inventory) must include the following information:
 - Total number of lead service lines
 - Total number of galvanized requiring replacement service lines
 - Total number of lead status unknown service lines
 - Total number of non-lead service lines
 - **Total number of lead connectors**
 - **Total number of connectors of unknown material**
 - **Total number of full lead service line replacements and full GRR service line replacements that have been conducted in each preceding program year**
 - **Total number of partial lead service line replacements and partial GRR service line replacements that have been conducted in each preceding program year**

DOH will provide an updated template in the near future!

Lead Service Line Replacement

- All PWSs with at least 1 lead/GRR/unknown service line are required to develop a service line replacement plan by late 2027.
- The replacement program must start no later than late 2027.
- Mandatory replacement of all lead and GRR service lines under a water system's control within **10** years or shorter if determined feasibly by DOH, unless:
 - Pathway 1: Systems with an annual replacement rate higher than 39 service line replacements per 1,000 households would be eligible for a deferred replacement deadline.
 - Pathway 2: Systems that would otherwise be required to replace more than 10,000 service lines per year under the proposed 10-year replacement requirement would be eligible for an extension.
- Replacement plans must be made publicly accessible.
 - Must be made online for systems serving > 50,000 people.
- The plan must be updated annually to include any new or updated information and submitted to the State on an annual basis.

Inventory Validation ✓



- All PWSs must validate the accuracy of the non-lead service line category in the inventory **except** for service lines:
 - With records showing the service line was installed after 6/19/1988.
 - With visual inspection of the pipe exterior at a minimum of two points.
 - That were previously replaced lead/GRR.
- Confirmation must be done by visual inspection at a minimum of two points.
- Number of validations required is based on size of validation pool.

Inventory Validation Deadline

Water System Type	Due Date
For PWS with only non-lead service lines in their baseline inventory	12/31/2034
For PWS subject to default Service Line Replacement deadline	12/31/2034
For PWS with shortened Service Line Replacement deadline	Established by DOH
For PWS with deferred Service Line Replacement deadline	3 years prior to the deadline for completing SLR

Distribution System and Site Assessment – Effective Late 2027

- Used to be called Find and Fix under LCRR
- An assessment that water systems must perform at every tap sampling site that yields a lead result above the lead action level of 0.010 mg/L.



Lead & Copper Tap Sampling Requirements

- The sampling tiers and tap sampling requirements have changed!
- Tap sampling under the LCRI requirements (ie. new sampling tier) begins in 2028.
- PWS to submit a revised tap sampling plan to DOH for review and approval by late 2027.
- PWS with Tier 1 through 3 will need to return to standard monitoring frequency starting 2028.
- Sampling plan templates will be provided.



Existing Lead & Copper Tap Sampling Tiers

Tiers	Community Water System	Non-Transient Non-Community Water System
Tier 1	Single family homes with copper pipes and lead solder installed after 1982 and/or has a lead service line.	Building with copper pipes and lead solder installed after 1982 and/or has a lead service line.
Tier 2	Buildings, including multi-family homes , with copper pipe and lead solder installed after 1982 and/or has a lead service line.	Building with copper pipes and lead solder installed before 1983.
Tier 3	Single family homes with copper pipes and lead solder installed before 1983.	N/A
Other	Sites throughout the system representing typical plumbing materials used in the system.	Sites throughout the system representing typical plumbing materials used in the system.

NEW Lead & Copper Tap Sampling Tiers – Effective Late 2027

Tiers	Community Water System	Non-Transient Non-Community Water System
Tier 1	Single-family structures with premise plumbing made of lead and/or served by a lead service line.	Single-family structures with premise plumbing made of lead and/or served by a lead service line.
Tier 2	Buildings, including multiple-family residences, with premise plumbing made of lead and/or served by a lead service line.	Buildings, including multiple-family residences, with premise plumbing made of lead and/or served by a lead service line.
Tier 3	Single-family structures with sites that are served by a lead connector or sites served by a galvanized service line or containing galvanized premise plumbing identified as ever having been downstream of a lead service line.	Sites that are served by a lead connector or sites served by a galvanized service line or containing galvanized premise plumbing identified as ever having been downstream of a lead service line.
Tier 4	Single-family structures with sites that contain copper premise plumbing with lead solder installed before 1990.	Sites that contain copper premise plumbing with lead solder installed before 1990.
Tier 5	Representative of sites throughout the distribution system.	Representative of sites throughout the distribution system.

LCRR/LCRI Requirements in Consumer Confidence Reports

- Only applies to Community Water Systems
- Starting CY2024 CCR (due 7/1/2025)
 - Must start using the updated lead health effects language
 - Must start using the revised standard language on lead
 - Must include instructions to access the publicly available service line inventory
 - Must include instructions to access complete lead sampling data

Regulated in the Treatment Plant						
	Low	High	Average			
Chlorine (ppm)	2	0.14	0.012	0.012	2	Discharge of chlorine water; discharge of large volumes; amount of total chlorine; history of chlorine and maximum amount of chlorine residuals that are maintained in lines and tanks of distribution systems; photos and data reduction
Chlorine residuals (CLR) (ppm)	50	0	4.2	0.1	2	Discharge of chlorine water; discharge of large volumes; amount of total chlorine; history of chlorine and maximum amount of chlorine residuals that are maintained in lines and tanks of distribution systems; photos and data reduction
Lead (ppm)	AL + 1.3	0	0.088	0.006	13	Corrosion of household plumbing system; residue of metal deposits
Lead (ppm)	200	0	80	0.7	233	Discharge of chlorine water; discharge of large volumes; amount of total chlorine; history of chlorine and maximum amount of chlorine residuals that are maintained in lines and tanks of distribution systems; photos and data reduction
Lead (ppm)	4	0.6	0.8	0.7	4	Discharge of chlorine water; discharge of large volumes; amount of total chlorine; history of chlorine and maximum amount of chlorine residuals that are maintained in lines and tanks of distribution systems; photos and data reduction
Lead (ppm) (MCLG)	0.01	0.02	0.19	0.05	10	Discharge of chlorine water; discharge of large volumes; amount of total chlorine; history of chlorine and maximum amount of chlorine residuals that are maintained in lines and tanks of distribution systems; photos and data reduction
Total Organic Carbon (TOC) (mg/L)	TT - Annual average + 1	1.27	2.02	1.50	Not Applicable	Historically present in the water system
Water Quality (WQ)	TT - 10% of raw water samples must be < 2.0 TOC; 5% of samples can be < 1.0 TOC	0.03	0.07	0.04	Not Applicable	To verify, specifically to not exceed maximum in the water system

Regulated in the Distribution System						
	Low	High	Average			
Chlorine (ppm)	4 (MCL)	0.42	0.39	0.36	< 4 (MCL)	Discharge of chlorine water; discharge of large volumes; amount of total chlorine; history of chlorine and maximum amount of chlorine residuals that are maintained in lines and tanks of distribution systems; photos and data reduction
Chlorine Residuals (ppm)	Yearly Average (YAA) 0.2	6.6	0.1	0.3	Not Applicable	Discharge of chlorine water; discharge of large volumes; amount of total chlorine; history of chlorine and maximum amount of chlorine residuals that are maintained in lines and tanks of distribution systems; photos and data reduction
Chlorine Residuals (ppm)	Yearly Average (YAA) 0.2	25.2	0.1	0.3	Not Applicable	Discharge of chlorine water; discharge of large volumes; amount of total chlorine; history of chlorine and maximum amount of chlorine residuals that are maintained in lines and tanks of distribution systems; photos and data reduction

Lead and Copper Rule - Testing in Zone of Customer Tap. Testing to date every 3 years.						
	Low	High	Average			
Lead (ppm) (CRP)	AL + 1.3	0	0.01	0.01	13	Corrosion of household plumbing system; residue of metal deposits
Lead (ppm) (CRP)	AL + 1.3	0	0.01	0.01	2	Corrosion of household plumbing system; residue of metal deposits

Unregulated Contaminants						
Contaminant	Regulated Level (MCL)	Low	High	Average	Total Contaminant (ppm) (MCL)	Priority Contaminant
Chlorine Residuals (ppm)	Not Regulated	0.01	0.01	0.01	0	Not Applicable
Chlorine Residuals (ppm)	Not Regulated	0.01	0.01	0.01	0	Not Applicable
Chlorine Residuals (ppm)	Not Regulated	0.01	0.01	0.01	0	Not Applicable
Chlorine Residuals (ppm)	Not Regulated	0.01	0.01	0.01	0	Not Applicable

LCRR/LCRI Requirements in Consumer Confidence Reports

New CCR Content – 40 CFR 141.153(d)(4)(vi)

(vi) For lead and copper: the 90th percentile ~~value~~ concentration of the most recent round(s) of sampling ~~and~~, the number of sampling sites exceeding the action level, and the range of tap sampling results;

Contaminants (units)	Action Level	MCLG	90 th Percentile	# of sites exceeding the Action Level	Range of Detection	Typical Sources of Contaminants	Violation
January 1 – June 30, 2024							
Copper (ppm)	1.3	1.3	0.3	0 site over Action Level	ND – 0.5	Corrosion of household plumbing systems, Erosion of natural deposits.	No
Lead (ppb)	15	0	6	1 site over Action Level	ND – 16	Corrosion of household plumbing systems, Erosion of natural deposits.	No
July 1 – December 31, 2024							
Copper (ppm)	1.3	1.3	0.5	0 site over Action Level	ND – 1	Corrosion of household plumbing systems, Erosion of natural deposits.	No
Lead (ppb)	15	0	4	0 site over Action Level	ND – 12	Corrosion of household plumbing systems, Erosion of natural deposits.	No

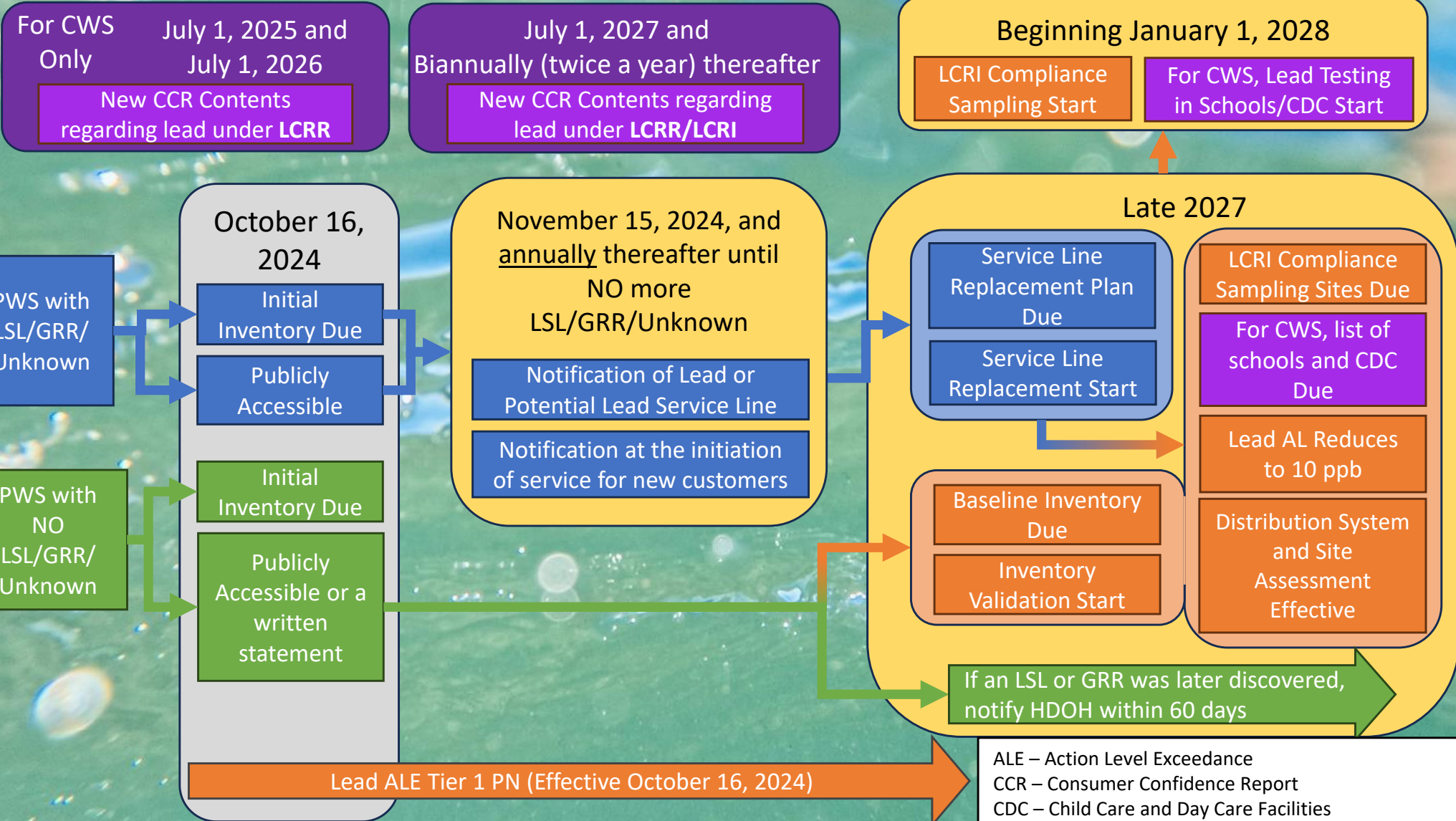
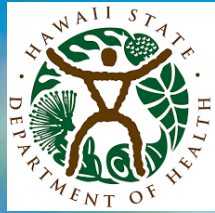
Lead Testing in Schools Sampling Requirements



- Only applies to Community Water Systems
- The list of schools and CDC should be submitted to DOH by late 2027.
 - The list should include all schools and CDC except those constructed after 1/1/2014 **AND** served by non-lead service lines.
- The first year of lead testing in school is January through December 2028.
 - Sample all schools and CDC within 5 years; 20% of total schools/CDC per year.
 - DOH may exempt one or more community water system(s) from this requirement by issuing a written waiver.
- Starting 2033, notify schools and CDC that they are eligible to be sampled for lead on request.



Summary



ALE – Action Level Exceedance
 CCR – Consumer Confidence Report
 CDC – Child Care and Day Care Facilities
 CWS – Community Water Systems
 GRR – Galvanized Requiring Replacement Service Lines
 LCRI – Lead and Copper Rule Improvements
 LCRR – Lead and Copper Rule Revisions
 LSL – Lead Service Lines

Applies to Systems with at least 1 LSL/GRR/Unknown
 Applies to Systems with only non-lead service lines

Applies to All Systems Subject to LCRR/LCRI
 Applies to Community Water Systems Only

Resources



LCRR/LCRI Summary



EPA LCR Resources



HDOH SDWB Home Page

SDWB HOME PAGE

NEW

Guidance on Lead & Copper Rule Revisions (LCRR) Lead Service Line Inventory (LSLI) Requirements

The SDWB is encouraging all affected water systems across the State of Hawaii to look ahead to the Lead and Copper Rule Revisions (LCRR) and its **Lead Service Line Inventory (LSLI)** requirement. The deadline for developing an initial inventory and submitting it to the SDWB is **October 16, 2024**, per 40 CFR §141.84(a-b). Water systems finding one or more lead, galvanized requiring replacement, or lead status unknown service lines in their distribution system must also, by October 16, 2024, submit a **Lead Service Line Replacement Plan** to the SDWB. These two documents will help water systems identify what is known and unknown about the service line materials in their distribution system, remove lead service lines from distribution systems on both the water system and private owner sides, communicate information to the public, and establish lead service line replacement priorities.

The SDWB strongly recommends using the EPA guidance and template below to submit their draft inventory to the SDWB. Please contact sdwb@doh.hawaii.gov if you require assistance.

- Main EPA website for the LCRR here: [Revised Lead and Copper Rule | US EPA](#)
- LSLI Guidance here: [Guidance for Developing and Maintaining a Service Line Inventory \(epa.gov\)](#)
- LSLI Template here: [Inventory Template](#) (updated January 3, 2024)



thank
you!

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