

Lead and Copper Rule Improvements: What's New and Different in the Proposed Rule?

March 26, 2024



Meet Your Speakers

- Robert D. Edelman, PE – Director, Division of Technical Services
- Steven J. Kvech, PE – Deputy Field Director, Lexington Field Office
- Paige C. Johns, PE – Acting Deputy Field Director, Culpeper Field Office
- Kendall Scott, MPH – Environmental Health Supervisor

Presentation Outline

Things that are changed by the Lead and Copper Rule Improvements (LCRI)

- Proposed LCRI Timing
- Sampling, monitoring, and reporting requirements
- Corrosion control treatment
- School and child care center lead testing
- Lead service line inventories
- Public and consumer notifications

Disclaimer

The intention of this webinar is to provide an overview of changes proposed by the LCRI:

- Based on the proposed LCRI published 12/6/23 in the Federal Register and ODW's understanding.
- Covers the major changes of LCRI and is not exhaustive.
- Future dates established by the LCRI are projected.
- Virginia may be more restrictive than the LCRI.
- Is subject to change in the final LCRI.

What's the interaction of LCRR and LCRI?

40 CFR 141.80 General requirements and action level.

40 CFR 141.80 (a)(4)(i) Between [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], and [DATE 3 YEARS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], community water systems and nontransient non-community water systems must comply with 40 CFR 141.80 through 141.91, **as codified on July 1, 2020**, except systems must also comply with 40 CFR 141.84(a)(1) through 141.84(a)(10) (excluding §§ 141.84(a)(7)); 141.85(e); 141.90(e)(1) and 141.90(e)(13); 141.201(c)(3); 141.202(a)(10); and 141.31(d), as codified on July 1, 2023.

My interpretation, but please read all details: July 1, 2020 is before the LCRR rule was promulgated. Inventory requirements have not changed.

Proposed LCRI Timing

LCRR compliance date is October 16, 2024

EPA must promulgate LCRI by October 16, 2024

LCRI Compliance Date will be 3 years later: October 2027 - Projected New deadline

Some things change in 2028 (Tap Sampling, CCR)

LCRI proposes to roll back many LCRR initiatives to pre-LCRR (2020 CFR)

[see next slide]

Some LCRR initiatives remain unchanged by LCRI (retain October 16, 2024):

- Lead Service Line Inventory - Due October 16, 2024
- Notification of customers with Lead, GRR and Unknown Service Lines
- Lead 90th Percentile AL Exceedance - Tier 1 Public Notification

LCRI proposes to temporarily roll back LCRR requirements

This means many things stay as currently written in the *Waterworks Regulations* until the LCRI compliance date.

40 CFR 141.80 through 141.91, **as codified on July 1, 2020,**

141.80 General requirements – contains 12/16/21 effective date, 10/16/24 compliance date, lead trigger level, lead action level, LCRR 90th percentile level, LCRR 90th percentile calculation methodology, LSL replacement required by trigger level.

141.81 Applicability of corrosion control treatment steps to small, medium, and large water systems (entirely new LCRR requirements)

141.82 Description of corrosion control treatment requirements (entirely new LCRR requirements)

141.83 Source water treatment requirements (nothing new with LCRR)

141.84 Lead service line replacement requirements (LSL Replacement Plan, Operating procedures for goosenecks, partial replacements, full replacements, goal and mandatory LSL replacements)

141.85 Public education and supplemental monitoring and mitigation requirements.

141.86 Monitoring requirements for lead and copper in tap water – sample site selection

141.87 Monitoring requirements for water quality parameters

141.88 Monitoring requirements for lead and copper in source water.

141.89 Analytical methods.

141.90 Reporting requirements.

141.91 Recordkeeping requirements.

What's not changing?

except systems must also comply with 40 CFR 141.84(a)(1) through 141.84(a)(10) (excluding §§ 141.84(a)(7)); 141.85(e); 141.90(e)(1) and 141.90(e)(13); 141.201(c)(3); 141.202(a)(10); and 141.31(d), as codified on July 1, 2023.

141.84(a)(1) through (a)(10) is the *Lead service line inventory – no change except:*

- 141.84(a)(7)) is the methodology for calculating the number of SL replacements – is changing

141.85(e) – Notification of known or potential service line containing lead

141.90(e)(1) – Reporting requirement – water systems must submit inventory to state no later than October 16, 2024

141.90(e)(13) – Reporting requirement – water systems with LSLs must certify on an annual basis that the system has complied with the consumer notification requirements of lead service line materials.

141.201(c)(3) – public notice requirement – a copy of the notice must also be sent to the primacy agency and the Administrator (as applicable)

141.202(a)(10) – tier 1 public notice – Exceedance for the action level for lead

and 141.31(d) – reporting requirements – Water system, within 10 days of completing a PN, must submit to the primacy agency a certification that it has complied with PN regulations.

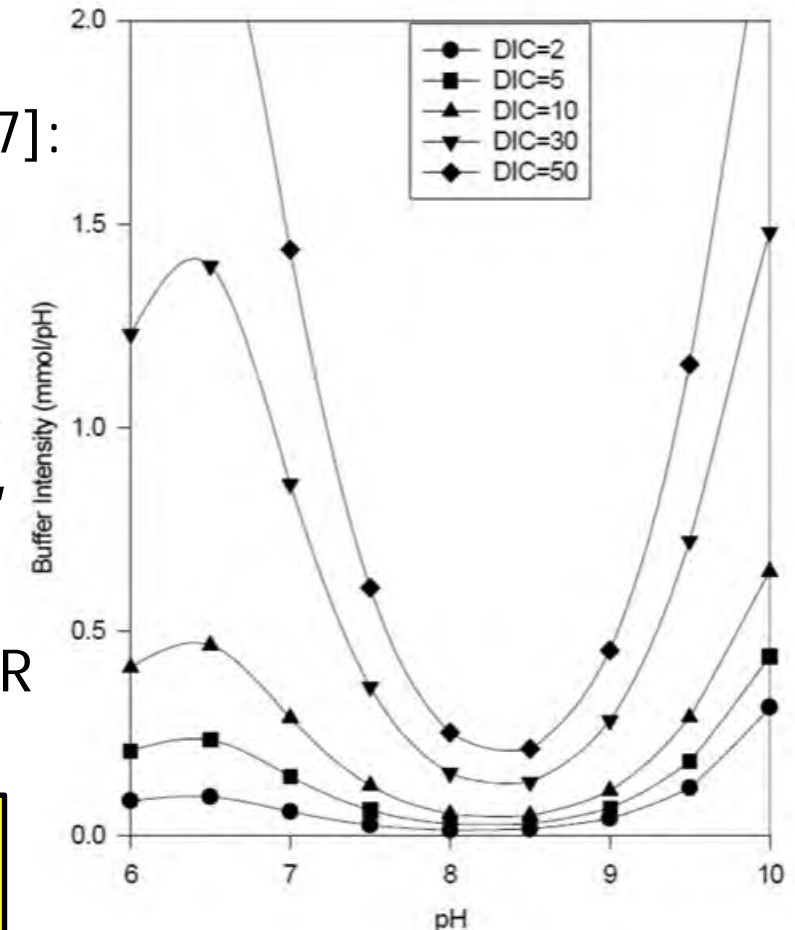
Sampling, Monitoring, and Reporting: Action Level and Trigger Level

Beginning with the Compliance Date of LCRI [October 2027]:

- ★ Removes the lead trigger level.
- ★ Decreases the lead action level to 0.010 mg/L.
- 90th Percentile (P90) level above lead action level of 0.010 mg/L or copper action level of 1.3 mg/L requires actions including installation or re-optimization of CCT, and PE and 24-hour PN (for lead action level exceedances).
- Mandatory full service line replacement of LSLs and GRR service lines is independent of P90 lead levels.

Recommended action items:

- Review corrosion control treatment operation
- Review P90 history



Sampling, Monitoring, and Reporting: Lead and Copper Tap Monitoring

Beginning with the Compliance Date of LCRI [October 2027]:
Sample Site Selection

- Retains LCRR requirement that all samples be collected from sites served by LSLs, if available.
- Combines the tap sample site selection tiering criteria for CWSs and NTNCWSs.
- Revises Tier 3 sites to include sites served by a lead connector as well as sites served by a galvanized service line or **containing galvanized premise plumbing** that are identified as ever being downstream of an LSL or lead connector in the past.

Recommended Action Item:

- Document lead connectors, galvanized premise plumbing in inventory
- Identify locations with LSL, complete replacements if possible



Sample Tier Comparison

LCRR

- “Tier 1 sampling sites” consist of single-family structures that are served by a lead service line. When multiple-family residences comprise at least 20 percent of the structures served by the water system, the system may include these types of structures in its Tier 1 sampling pool, if served by a lead service line. Sites with lead status unknown service lines must not be used as Tier 1 sampling sites.
- “Tier 2 sampling sites,” consisting of buildings, including multiple-family residences that are served by a lead service line. Sites with lead status unknown service lines must not be used as Tier 2 sampling sites.
- “Tier 3 sampling sites,” consisting of single-family structures that contain galvanized lines identified as being downstream of a lead service line (LSL) currently or in the past, or known to be downstream of a lead gooseneck, pigtail or connector. Sites with lead status unknown service lines must not be used as Tier 3 sampling sites.
- “Tier 4 sampling sites,” consisting of single-family structures that contain copper pipes with lead solder installed before the effective date of the State’s applicable lead ban. Sites with lead status unknown service lines must not be used as Tier 4 sampling sites.
- “Tier 5 sampling sites,” consisting of single-family structures or buildings, including multiple family residences that are representative of sites throughout the distribution system.

LCRI

- Tier 1 sampling sites are single family structures with premise plumbing made of lead and/or are served by a lead service line.
- Tier 2 sampling sites are buildings, including multiple-family residences, with premise plumbing made of lead and/or served by a lead service line.
- Tier 3 sampling sites are sites that are served by a lead connector. Tier 3 sites are also sites served by a galvanized service line or containing galvanized premise plumbing that are identified as ever being downstream of a lead service line or lead connector in the past. Tier 3 for community water systems only includes single-family structures.
- Tier 4 sampling sites are sites that contain copper pipes with lead solder installed before the effective date of the State’s applicable lead ban. Tier 4 for community water systems only includes single-family structures.
- Tier 5 sampling sites are sites that are representative of sites throughout the distribution system. For the purpose of this paragraph (a), a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the water system.

Sampling, Monitoring, and Reporting: Lead and Copper Tap Monitoring

Likely effective for tap monitoring beginning in 2028:

Collection and Analysis

- ★ Requires collection of first- and fifth-liter samples in homes with LSLs.
- ★ Requires the higher value of the first- and fifth- liter lead concentration in homes with LSLs to be used to calculate the 90th percentile value for lead.
- ★ Requires states and water systems to consider any sampling in addition to the minimum samples (such as customer-requested samples) in calculating the 90th percentile



Recommended Action Items:

- Collect some special (non-compliance) first and fifth-liter samples from LSLs to discover if to expect higher lead sample results.
- System to track and identify the tier of customer-requested samples

Sampling, Monitoring, and Reporting: Lead and Copper Tap Monitoring

Likely effective for tap monitoring beginning in 2028:

Monitoring schedule is based on both lead and copper P90 levels for all systems as follows:

- All water systems with lead, GRR, and/or unknown service lines must begin by collecting a standard number of samples semi-annually.
- Systems with Nonlead service lines may remain on current monitoring schedule if monitoring meets requirements of the LCRI.
- Systems may retain or qualify for reduced monitoring based on the number of consecutive monitoring periods:
 - $P90 \leq$ action level for 2 consecutive 6-month periods: Annual monitoring at the standard number of sites for lead and reduced number of sites for copper.
 - $P90 \leq$ practical quantitation limit (PQL) for 2 consecutive 6-month periods: Triennial monitoring at the reduced number of sites.

Recommendations:

- Plan for Standard Monitoring beginning 2028 if you have Lead, GRR, and/or Unknown service lines.
- If you have all Nonlead service lines, determine if current sampling meets LCRI (examine tiers of sample locations).

Lead and Copper Rule Improvements: Corrosion Control Treatment

Steve Kvech, PE

ODW Lexington Field Office Deputy Field Director

March 26, 2024



What is Corrosion Control Treatment (CCT)?

40 CFR 141.2 Definitions

“Optimal corrosion control treatment (OCCT), for the purpose of subpart I of this part only, means the corrosion control treatment that minimizes the lead and copper concentrations at users’ taps while ensuring that the treatment does not cause the water system to violate any national primary drinking water regulations.”

“System without corrosion control treatment, for the purpose of subpart I of this part, means a water system that does not have or purchases all of its water from a system that does not have:

- (1) An optimal corrosion control treatment approved by the State; or*
- (2) Any pH adjustment, alkalinity adjustment, and/or corrosion inhibitor addition resulting from other water quality adjustments as part of its treatment train infrastructure.”*

What is Corrosion Control Treatment?

Key concept: A waterworks may have Corrosion Control Treatment (CCT) already, but not Optimal Corrosion Control Treatment (OCCT).



How does Corrosion Control Treatment Apply?

40 CFR 141.81 Applicability of corrosion control treatment steps for small, medium, and large water systems.

- Large – population > 50,000
- Medium – population > 10,000 and $\leq 50,000$
- Small – population $\leq 10,000$ and Non-transient non-community



How does Corrosion Control Treatment Apply?



Action Level (lead and/or copper) exceeded under LCRI?

- Waterworks without CCT must install CCT (possible to “pause”)
- Waterworks with CCT must re-optimize (to OCCT)
- Waterworks with OCCT meeting OWQP’s must only re-optimize once unless state requires otherwise.

Alternatives to Corrosion Control Treatment

Action Level (lead and/or copper) exceeded under LCRI? Other Options...

- **“Small System Flexibility”**
 - Community $\leq 3,300$ and all NTNC can select another option than CCT.
Reduced from LCRR which went up to 10,000 for Community
- **Deferred OCCT / re-optimization**
 - Must remove 100% of LSL's and GRR's within 5 years
 - 20% annual replacement rate
 - System with CCT must maintain CCT during that period
 - If system still exceeds AL after replacements, must restart CCT process

Steps and Deadlines for Waterworks without CCT

Keep sampling for lead & copper while completing CCT steps

Step 1 – Pipe Rig, CCT Study or CCT Recommendation

- **Medium** or **Large** system (>10,000) with lead service lines?
 - Harvest lead pipes, run pipe rig within 1 year of AL exceedance period. Use pipe rig to conduct OCCT study. Challenging!
- **Large** water system (>50,000) without lead service lines? (rare case)
 - CCT Study to determine OCCT
- All other cases?
 - Recommend OCCT within 6 months of end of period AL exceeded in

Steps and Deadlines for Waterworks without CCT

Step 2 – State requires CCT Study or designates OCCT

- Within one year of end of period AL exceeded in, State may request CCT study or
- Within 18 months (**medium** system) specify OCCT
- Within 24 months (**small** system) specify OCCT



Step 3 – CCT Study duration

- **Large** and **Medium** with LSL's. Complete and Recommend OCCT within 30 months (from end of period lead AL exceeded in)
- State required? Complete within 18 months (from end of period...)

Steps and Deadlines for Waterworks without CCT

Step 4 – State must designate OCCT within 6 months of CCT Study results

Step 5 – Waterworks must install OCCT within 24 months of designation

Step 6 – Conduct follow-up monitoring

Step 7 – State designates OWQP's within 6 months of Step 6 completion

Step 8 – Systems must meet OWQP's, conduct tap and WQP monitoring

Small and Medium systems can “pause” OCCT

A **small** or **medium** waterworks that doesn't have CCT and keeps monitoring can pause/stop the process of installing OCCT if they don't exceed AL's for two consecutive 6-month periods under certain conditions

- Must take the minimum required amount of samples to use this “pause”. Can't use 90th percentile based on fewer samples.
- **Medium** systems with LSL's must complete CCT Study (Steps 2-3)
- If they reach and start Step 5 (24 months to install OCCT) they can't pause.
- If they exceed AL later, the “pause” ends and they start again where they left off.
- Can only use this provision one time!
- State can make a waterworks go back and repeat prior steps already completed.

Steps and Deadlines for Waterworks with CCT

Keep sampling for lead & copper while re-optimizing

Step 1 – Pipe Rig, CCT Study or CCT Recommendation

- **Medium or Large system with lead service lines:** Harvest lead pipes, run pipe rig within 1 year of AL exceedance period. Use pipe rig to conduct OCCT study.
- **Large water system without lead service lines:** OCCT Study
- **All other cases:** Recommend re-optimized OCCT within 6 months of end of period AL exceeded in.

Steps and Deadlines for Waterworks with CCT

Keep sampling for lead & copper while re-optimizing

Step 1 – Pipe Rig, CCT Study or CCT Recommendation

- **All can propose existing CCT modification within those 6 months after AL exceeded.** State must look at past CCT studies before approving. If State approves, it must specify new OCCT within 12 months from end of period. System must then complete changes in 6-month and then go to Step 6 (follow up monitoring).

Steps and Deadlines for Waterworks with CCT

Step 2 – State requires CCT Study or designates re-OCCT

- Within one year of end of period AL exceeded in, State may request CCT study for **medium** w/o LSL's or any **small**.
- If state doesn't require CCT study, it must specify re-OCCT within:
 - 1 year of end AL exceedance period for **medium** systems
 - 18 months of end of AL exceedance period for **small** systems

Step 3 – CCT Re-optimization Study duration

- **Large** and **Medium** with LSL's. Complete and Recommend OCCT within 30 months (from end of period lead AL exceeded in)
- State required? Complete within 18 months of lead and/or copper AL

Steps and Deadlines for Waterworks with CCT

Step 4 – State must designate re-OCCT within 6 months of CCT Study results

Step 5 – Waterworks must install re-OCCT within one year of designation

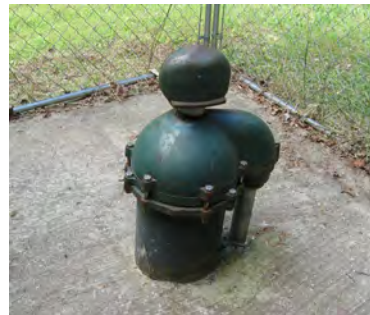
Step 6 – Conduct follow-up monitoring

Step 7 – State designates OWQP's within 6 months of Step 6 completion

Step 8 – Systems must meet OWQP's, conduct tap and WQP monitoring

Notification of Long-term Treatment or Source Changes

- Waterworks must notify state and state must approve prior to change occurring.
- State may require additional monitoring or other actions



Routine Water Quality Parameter Monitoring at Entry Points and in Distribution System

MORE COMPLICATED:

- **Medium** and **large** systems ($\geq 10,000$) with CCT (unless deemed optimized) must monitor for WQP's.
- All **small** systems ($< 10,000$) and all **medium** systems $\leq 50,000$ w/o CCT that exceed either AL must continue 6-month monitoring for lead and copper until AL's no longer exceeded for 2 consecutive 6-month periods.
- **Medium** systems w/o CCT (10,001 - 50,000) population that exceed lead AL and are required to install CCT must continue 6-month WQP monitoring.

Lead and Copper Rule Improvements

School and Childcare Center Sampling



KENDALL SCOTT

Financial and Construction Assistance Programs

Office of Drinking Water

Agenda

- Rule Overview - What has changed?
- Review of General Requirements
- Waivers and Funding Opportunities

LCR, LCCR, and LCRI - What is the difference?

Lead and Copper Rule (LCR)	Lead and Copper Rule Revisions (LCRR)	Proposed Lead and Copper Rule Improvements
Does not include separate testing and education program for CWSs at schools and child care facilities.	CWSs must conduct sampling at 20 percent of elementary schools and 20 percent of child care facilities per year and conduct sampling at secondary schools on request for first testing cycle (5 years) and conduct sampling on request of all schools and child care facilities thereafter.	Expands waivers for CWSs to sample in schools and child care facilities during the first 5-year testing cycle if the facility has been sampled between January 1, 2021, and the LCRI compliance date.
Schools and child care facilities that are classified as NTNCWSs must sample for lead and copper.	Sample results and PE must be provided to each sampled school/child care facility, State, and local or State health department.	Requires CWSs to include a statement about the opportunity for schools and child care facilities to be sampled in the CCR.
	Excludes facilities constructed on or after January 1, 2014. (September 4, 2018 in Virginia)	Excludes facilities constructed or had full plumbing replacement on or after January 1, 2014.
	Waives schools and child care facilities that were sampled under a State or other program after October 16, 2024.	

General LCRI Requirements

- Compile a list of facilities
- Conduct annual public education about lead in drinking water
- Sample at primary schools and childcare centers
- Provide results and communicate remediation strategies to schools and childcare facilities

LCRI Requirements

Compile a list of facilities by the LCRI Effective Date (October 2027)

- All schools and childcare facilities served by the community water system
- All public and private schools
- All facilities constructed before September 4, 2018 (Virginia Uniform Statewide Building Code)
- Requirement applies to licensed childcare facilities

Description	Possible Local Name	LCRI Classification	LCRI Sampling Mandatory
Preschool	Preschool	Elementary School	Yes
Kindergarten - 3 rd grade	Primary School	Elementary School	Yes
Kindergarten - 5 th grade	Elementary School	Elementary School	Yes
Kindergarten - 6 th grade	Elementary School	Elementary School	Yes
Kindergarten - 12 th grade	Combined School	Elementary School	Yes
4 th - 6 th grades	Elementary School	Elementary School	Yes
6 th - 8 th grades	Middle School	Elementary School	Yes
7 th - 8 th grades	Junior High School	Secondary School	On Request
9 th - 12 grades	High School	Secondary School	On Request

LCRI Requirements

Conduct Directed Public Education Every Year

- Health Effects of Lead
- Sources of Lead
- Steps to Reduce Exposure
- *Repeated Every Year to All Facilities*

Conduct Notification of Sampling Requirement

- A proposed sampling schedule
- Information about sampling, consistent with EPA's Training, Testing, and Taking Action (3Ts)
- Instructions for selecting outlets and preparing for sampling event

LCRI Requirements

Required Sample Frequency

- Collect samples from at least 20% of elementary schools and 20% of childcare facilities
- Continue to collect samples from at least 20% of facilities each year until all facilities are sampled (**Starting in 2028**)
- All elementary schools and childcare facilities must be sampled **at least once by 2032**.

Requested Sampling Requirements

- All high schools must be sampled upon request
- Sampling must be provided upon request, for all schools, after initial 5-year sampling cycle
- Sampling is only required at any school or childcare facility once every five years

LCRI Requirements

Schools

- Collect at least five samples from locations typically used for consumption

Childcare Facilities

- Collect at least two samples from highest risk area

Schools (5 Samples)	Childcare Facility (2 Samples)
2 - Drinking Water Fountains	1 - Drinking Water Fountain
1 - Kitchen Faucet*	1 - Kitchen Faucet* or Classroom**
1 - Classroom Faucet or Other Outlet	
1 - Nurse's Office Faucet	

* Used for Drinking or Cooking

** Used for Human Consumption

How do sampling protocols differ?

Lead and Copper Rule (LCR)	Lead and Copper Rule Improvements (LCRI)
<p>Sampling Protocol: The LCR takes a <u>system-wide approach</u>. If the 90th percentile lead level concentration of tap samples exceeds the 15 µg/L action level, water systems must take additional actions. The sampling protocol under the LCR includes a <u>1-L first draw sample</u> after a stagnation period of 6 hours.</p>	<p>Sampling Protocol: Only schools and childcare facilities that own and/or operate a public water system must meet the requirements of the LCR. Under the LCRI, EPA recommends <u>sampling and follow-up actions be taken at each individual outlet</u>. The protocol under the LCRI includes a <u>250-mL first draw sample</u> after an 8 to 18 hour stagnation period.</p> <p>RECOMMENDATION: Collect a 250-mL flush sample after 30 seconds.</p>
<p>Follow-Up Actions: Water systems are <u>required to undertake treatment actions</u>, depending upon system size and corrosion control treatment status. These include corrosion control, public education, water quality monitoring, and lead service line replacement.</p>	<p>Follow-Up Actions: The initial sample and the follow-up flush sample will help determine the source of the lead. This includes <u>removing fixtures and repairing/replacing water coolers</u>, to minimize exposure.</p>

LCRI Requirements

Sample Results Reporting Requirements

- The water system must provide schools and childcares results no later than 30 days after receiving laboratory analytical data
- Must include information about remediation options
- All sample results must be reported to the Virginia Department of Health annually

What About Waivers & Funding Opportunities?

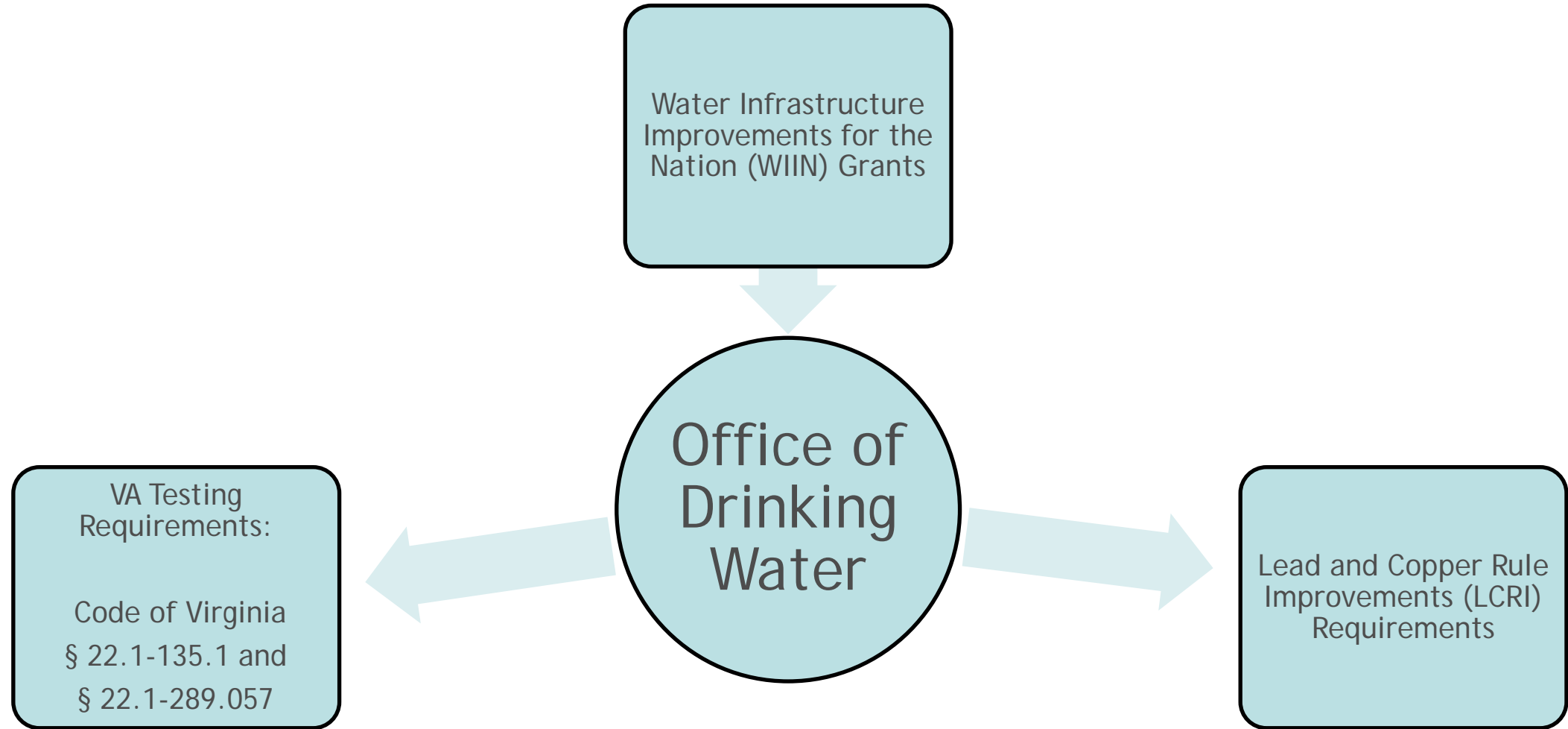
Proposed Lead and Copper Rule Improvements (LCRI)

Per 40 CFR 141.92(h): *“If schools and child care facilities served by a community water system are sampled for lead in drinking water under a State or local law or program, the State may exempt one or more community water system(s) from the requirements of this section by issuing a written waiver”*

Per 40 CFR 141.92(h)(5): *“The State may issue a waiver for community water systems to conduct the requirements of § 141.92 for the first five years following the compliance date in § 141.80(a)(3) in the schools and child care facilities that were sampled for lead between January 1, 2021 and the compliance date in § 141.80(a)(3)...”*

- **Start Early!**
- Assistance and/or records may be available from Schools and Childcare Facilities
- Utilize Virginia Department of Health - Office of Drinking Water grant funding
- Waivers may be issued for sampling that occurred between January 1, 2021 and the future LCRI compliance date

What About Waivers & Funding Opportunities?



Why make lead sampling more complicated?

Young children, infants, and fetuses are particularly vulnerable to lead exposure:

- Nervous System Damage
- Reduced IQ and Attention Span
- Learning Disabilities
- Poor Classroom Performance
- Hyperactivity
- Impaired Growth
- Hearing Loss



Why make lead sampling more complicated?

Prolonged lead exposure in adults can lead to:

- Cardiovascular Effects
- Kidney Failure
- Reproductive Problems





Interested in Learning More?

Kendall.Scott@vdh.virginia.gov

(804) 316-2136

Lead Testing & Reduction Grant Program

Financial and Construction Assistance Programs (FCAP)



Lead and Copper Rule Improvements: Service Line Inventories and Lead Service Line Replacement Plans

Paige C. Johns, PE
Acting Deputy Field Director - Culpeper Field Office
paige.johns@vdh.virginia.gov



Service Line Inventory

- Due Dates
- Data
- Accessibility

Lead/Galvanized Requiring Replacement (GRR) Plan

- Due Date
- Components
- Accessibility

Service Line Replacement

- Applicability and Deadline
- Timing
- Outreach and Customer Service



Service Line Inventory: Due Dates

- Initial Service Line inventory still due October 16, 2024.
- New inventory requirements as described in the LCRI must be added to the inventory by the LCRI compliance date **(ODW expects this will be around October 2027)**.
- The updated inventory, with all it must include per the LCRI, is sometimes referred to as the **LCRI baseline inventory**.

Inventory Requirements: Data

- Review records re: connector materials and include lead connectors in LCRI baseline inventory.
- LCRI baseline inventory must include a street address with **each service line**.
- **Validate accuracy of the non-lead service line category no later than 7 years after the LCRI compliance date (~2034).**
- **Systems must identify all unknown service lines by replacement deadline (~2037 in most cases).**

Inventory Requirements: Accessibility

- The inventory must be made publicly accessible; systems serving > 50,000 people must make inventory available online.
- Inventory must be updated **annually**.
- **Systems must respond to customer inquiries on incorrect material categorizations within 60 days.**

Lead/GRR Replacement Plan: Due Date

- All systems with at least one lead, GRR, or unknown service line must develop a service line replacement plan by the **~10/2027 LCRI effective date.**



Lead/GRR Replacement Plan: Required Components

- Strategies for identifying unknowns
- Procedures for full service line replacement
- Customer communication strategy
- Flushing instructions
- Replacement prioritization criteria (location of known lines, vulnerable/disadvantaged consumers, etc.)
- Funding strategy
- **Outreach strategy for informing consumers about plan and replacement program, including legal requirements related to property access and tariffs**

Lead/GRR Replacement Plan: Accessibility

- Systems serving >50,000 people must make plan available online.
- Service line replacement plan must be made publicly accessible.

Service Line Replacement: Applicability and Deadline

- Mandatory full lead/GRR line replacement, regardless of tap sampling P90 lead levels
- All C and NTNC waterworks with one or more lead, GRR, or unknown line must
 - (1) identify all unknowns and
 - (2) replace all LSLs and GRRs under their controlno later than 10 years after ~10/2027 LSLI effective date unless eligible for a deferred deadline (high number of replacements).
- Replace lead connectors when encountered

Service Line Replacement: Timing

- Systems must replace service lines at minimum average annual rate of 10% (calculated on a rolling 3-year period) unless subject to a shortened or deferred deadline.
- Replacement rate is applied to the number of LSLs and GRR lines in the baseline inventory plus the number of unknown service lines updated annually.

Service Line Replacement: Outreach & Customer Service

- Document at least **four attempts** to engage property owners about full service line replacement.
- Work with customers to ensure full service line replacement:
 - **When replacing system-owned portion, must offer to replace customer-owned portion (within 45 days for emergencies).**
 - When notified that customer-owned portion of line has been replaced, must replace system-owned portion within 45 days.
- Provide pitcher filters and cartridges for 6 months after replacements.
- Collect tap sample at connections served by replaced line within 3-6 months of replacement.

Service Line Inventory

- Initial inventory still due and publicly available 10/16/2024
- LCRI baseline inventory due ~10/2027 (add connectors, addresses)
- Non-lead status to be validated, unknowns eliminated in ~10 years

Lead/GRR Replacement Plan

- Plan due ~10/2027
- Include unknown ID strategy, replacement prioritization, outreach
- Must be publicly available, online if >50,000 customers

Service Line Replacement

- All lead and GRR to be replaced regardless of tap sampling
- 10 years to complete (starting ~10/2027), average 10% per year
- High bar for customer outreach to replace full lines

Public Education and Outreach

Mandatory Health Effect Language

- Revises the mandatory lead health effects language to improve completeness and clarity.
- Use the updated health effects language in PN and all PE materials.
- CWSs must provide updated health effects language in the CCR.

New Language Translation Requirements

- For water systems serving a large proportion of consumers with limited English proficiency, all PE materials must include a translated statement regarding the importance of the materials and consumers can contact the system to get the materials translated in other languages.

New Tap Sample Results Deadline

- Water systems must deliver consumer notice of lead and copper tap sampling results to consumers whose tap was sampled as soon as practicable but **no later than 3 days after receiving the results.**

Recommended Action Items:

- Update templates effective with Compliance Date
- Determine language needs of customers, procure translation services
- Ready consumer notice templates, new business process to handle short delivery deadlines.

Public Education and Outreach

If P90 > lead action level:

- ★ LCRR Public Notification requirements apply (Tier 1 PN, notification to EPA and State)
 - Public Education no later than 60 days after the end of the tap sampling period until the system no longer exceeds the action level unless the State approves an extension.
- ★ Water systems with multiple lead action level exceedances (at least 3 action level exceedances in a 5-year period) must conduct additional public outreach activities and make filters available.

★ Customer Requested Sampling

- Water systems must offer to sample the tap for lead for any customer with a lead, GRR, or unknown service line who requests it.
- Water systems that exceeds the lead AL must offer to sample for lead for any customer who requests it.

Disturbances

- Water systems must deliver notice and educational materials to consumers during water-related work that could disturb LSLs.

Public Education to local and state health agencies (annual)

- Locations of tap samples that exceeded 0.010 mg/L lead
- Follow-up actions
- Public education materials

Recommended Action Items

- New business process to support offering, collecting, and tracking customer requested lead samples.
- Laboratory support for customer requested lead samples.
- PE and CN templates on-hand, ready for use.
- Tickler schedules for recurring requirements.

Consumer Confidence Report

Beginning in 2028:

Revised Mandatory Health Effect Language

- CWSs must provide updated health effects language in the CCR.
- CWSs must provide an updated informational statement about lead in the CCR.

Sampling at Schools and Child Care Facilities

- CWSs must include a statement in the CCR about the system sampling for lead in schools and child care facilities and may direct the public to contact their school or child care facility for further information.

Accessing the Service Line Inventory and Replacement Plan

- CWSs with lead, GRR, or unknown service lines must include a statement in the CCR about how to access the service line inventory and replacement plan.



LCRR/LCRI Update – Due this Year

1. Initial Service Line Inventory - Due October 16, 2024
 - Must be made publicly available; for systems serving 50,000 and more - available online
2. Initial notification to customers with lead, GRR, or unknown service lines within 30 days of completion of the initial inventory.
3. 24-hour (Tier 1) notification for action level exceedance (15 ppb AL until LCRI Compliance Date)

Check the ODW LCRR Guidance Website for updates!



Questions?

