Current Lead and Copper Rule Requirements (LCRR) and Upcoming Rule Changes (LCRI)

June 4th, 2026
Greensboro

Stephanie Galindo
Public Water Supply Section

Overview

- **Lead and Copper Rule Revisions (LCRR) – Current Requirements**
  - Initial Service Line Inventory
  - Service Line Material Notices
  - Lead Action Level Exceedance (ALE) Tier 1 (24-Hour) Public Notification
  - Revised Lead Health Effects Language
  - CCR changes

- **Lead and Copper Rule Improvements (LCRI) – Upcoming Changes**

Lead and Copper Rule Revisions (LCRR)

Lead and Copper Rule Revisions (LCRR)

- Original compliance date for the LCRR was January 16, 2024.
- The LCRR compliance date was moved to October 16, 2024 as EPA reviewed and “improved” the rule.
- Due to modifications in the LCRI, only four LCRR requirements went into effect on the October 16, 2024 compliance date. These included:
  - Initial Service Line Inventory
  - Service Line Material Notices
  - Lead Action Level Exceedance (ALE) Tier 1 (24-Hour) Public Notification
  - Revised Lead Health Effects Language

Lead and Copper Rule Revisions (LCRR)

EXHIBIT 3—REQUIREMENTS INTRODUCED IN THE 2021 LCRR THAT WATER SYSTEMS MUST COMPLY WITH BETWEEN OCTOBER 16, 2024, AND THE LCRI COMPLIANCE DATE

Citation (CFR codified July 1, 2023)	Description
§ 141.84(a)(1) through (10) (excluding paragraphs (a)(6) and (7)).	Initial public service line inventory development.
§ 141.90(e)(1)	Submission of initial inventory to the State.
§ 141.85(e)	Initial and annual notification of known or potential service line containing lead.
§ 141.85(a)(1)(ii)	Revised lead health effects language.
§ 141.90(e)(13) and (f)(4)	Annual reporting and certification of the notifications in § 141.85(e) to the State.
§ 141.90(h)(3)	State provides results of the 90th percentile lead calculations, in writing, to the water system within 15 days of the end of the tap sampling period (if applicable).
§§ 141.201(a)(3)(vi) and 141.202(a)(10)	Tier 1 PN for exceedance of the lead action level as specified in § 141.80(c).[1]
§§ 141.201(c)(3) and 141.31(d)(2)	Submit copy of Tier 1 PN for a lead action level exceedance to the head of the primacy agency and the EPA administrator no later than 24 hours after the system learns of the exceedance.
40 CFR part 141, appendix A to subpart Q, section I.C.1 (excluding § 141.90, except paragraphs (e)(1) and (13) and (f)(4)).	Tier 3 PN required for: failure to notify persons served at service connections of a known or potential service line containing lead and failure to submit initial inventory to the State by October 16, 2024.
40 CFR part 141, appendix B to subpart Q, section D.23	Revised lead health effects language for required PN.

[1] As codified on July 1, 2020.

Initial Service Line Inventory

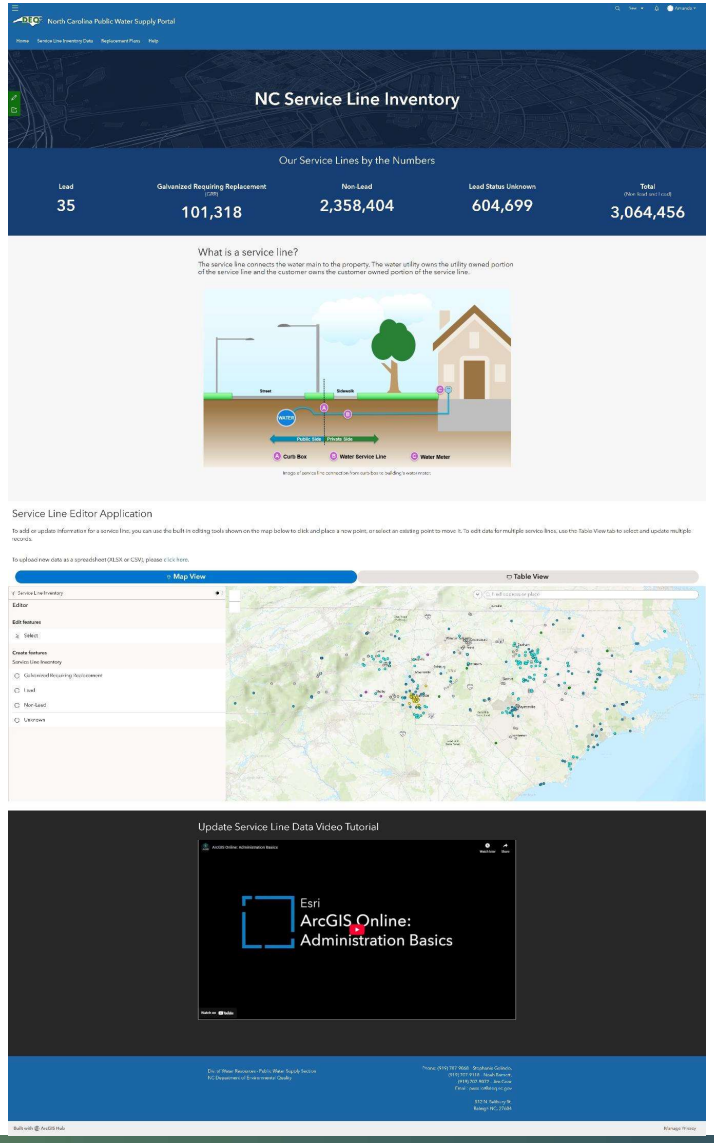
- The LCRR required systems subject to the Lead and Copper Rule develop an inventory of all service line connections, both system-owned and customer-owned, by the compliance date of October 16, 2024.
- Based on the service line material of both the system-owned and customer-owned portions of the service line, each service was classified as one of four material types, by rule:
  - Lead
  - Galvanized Requiring Replacement (GRR)
  - Unknown Material
  - Non-Lead
- Water systems in NC completed an inventory template and submitted their inventory through the Service Line Inventory Submission Portal application.
  - https://www.deq.nc.gov/about/divisions/water-resources/drinking-water/lead-service-line-inventory
    https://pws.ncwater.org/SLIWeb/pages/default.aspx

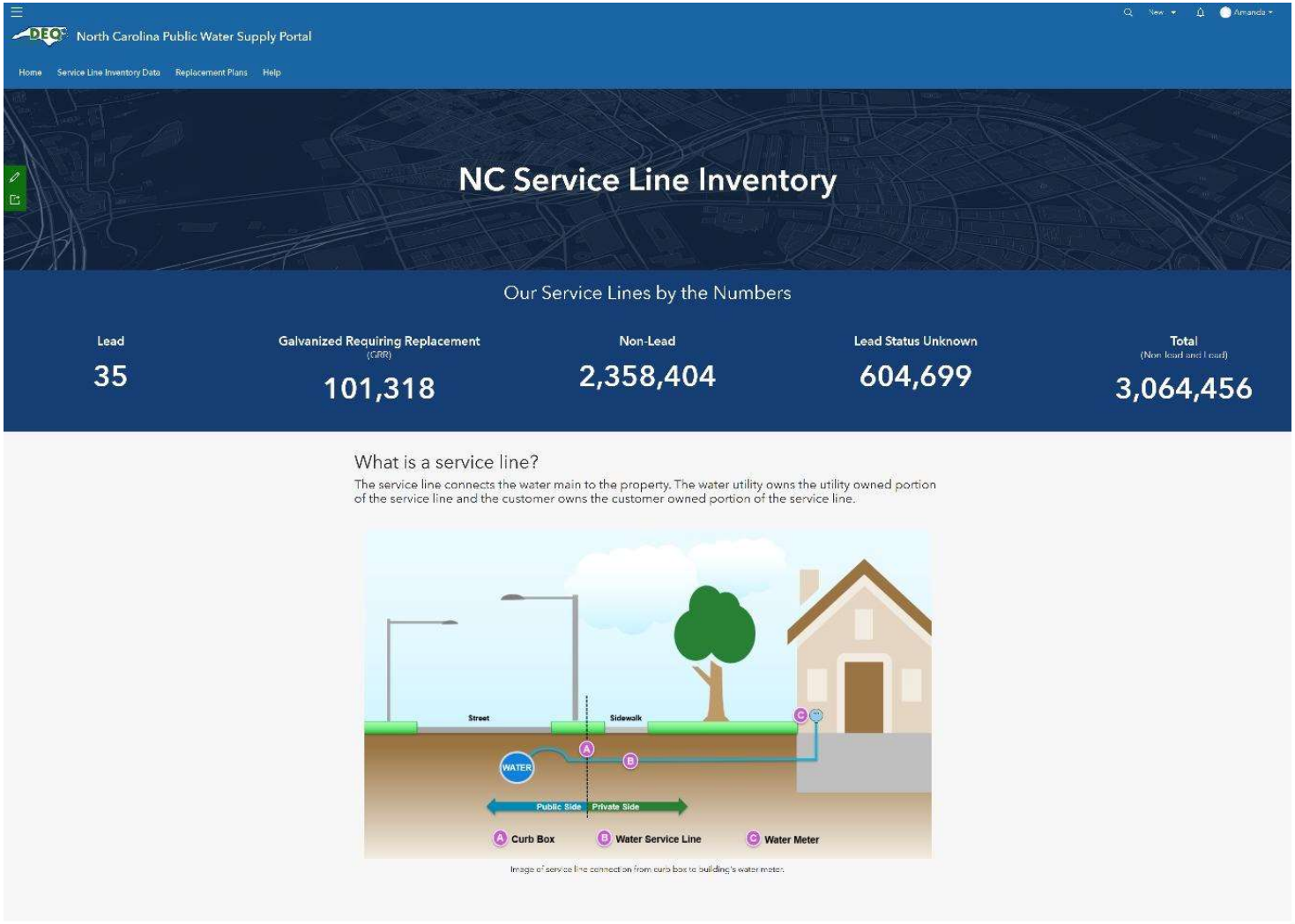
Initial Service Line Inventory

- 2,333 (98.56%) inventories out of the 2,367 required have been received as of May 28, 2026.
  - 34 (1.44%) Outstanding

- Of the inventories received so far, 3,647,365 total service lines have been reported. The material breakdown of these services lines is as follows:
  - Lead – 254 (0.01%)
  - GRR – 15,038 (0.41%)
  - Unknown Material – 629,698 (17.26%)
  - Non-Lead – 2,998,182 (82.20%)

- These inventories have been renamed the “initial” service line inventories, as the LCRI added additional inventory requirements as part of a new “baseline” inventory
  - Connectors
  - Annual Updating

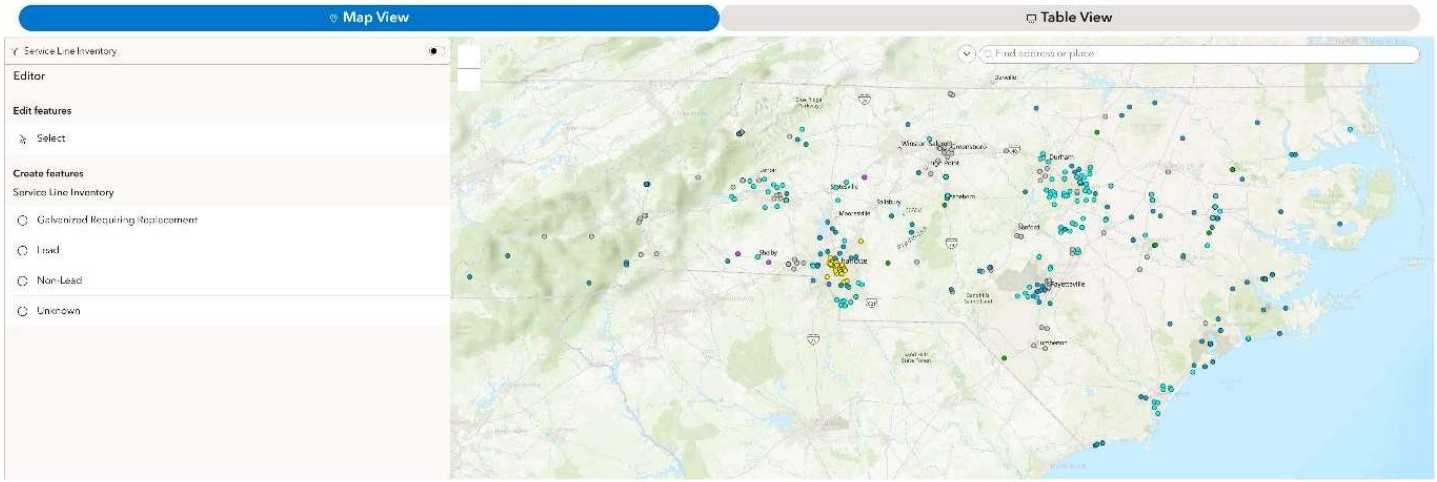

North Carolina Public Water Supply Portal
Home
Service Line Inventory Data
Replacement Plans
Help
NC Service Line Inventory
Our Service Lines by the Numbers
Lead
35
Galvanized Requiring Replacement
101,318
Non-Lead
2,358,404
Lead Status Unknown
604,699
Total
3,064,456
What is a service line?
The service line connects the water main to the property. The water utility owns the utility owned portion of the service line and the customer owns the customer owned portion of the service line.
Street
Sidewalk
Public Side
Private Side
A Curb Box
B Water Service Line
C Water Meter
Service Line Editor Application
Map View
Table View
Service Line Inventory
Editor
Edit features
Select
Create features
Galvanized Requiring Replacement
Lead
Non-Lead
Unknown
Update Service Line Data Video Tutorial
Esri
ArcGIS Online:
Administration Basics


North Carolina Public Water Supply Portal
Home
Service Line Inventory Data
Replacement Plans
Help
NC Service Line Inventory
Our Service Lines by the Numbers
Lead
35
Galvanized Requiring Replacement
(GRR)
101,318
Non-Lead
2,358,404
Lead Status Unknown
604,699
Total
(Non lead and Lead)
3,064,456
What is a service line?
The service line connects the water main to the property. The water utility owns the utility owned portion of the service line and the customer owns the customer owned portion of the service line.
Street
Sidewalk
WATER
Public Side
Private Side
A Curb Box
B Water Service Line
C Water Meter
Image of service line connection from curb box to building's water meter.

Service Line Editor Application

To add or update information for a service line, you can use the built in editing tools shown on the map below to click and place a new point, or select an existing point to move it. To edit data for multiple service lines, use the Table View tab to select and update multiple records.

To upload new data as a spreadsheet (XLSX or CSV), please click here.



Update Service Line Data Video Tutorial

Service Line Material Notices

- The LCRR requires that a system send a notice to all customers served by lead, GRR, or unknown material service lines annually.
  - NC interpreted annually as by the end of the calendar year.
- Water systems required to certify distribution of notices to customers within the proper timeframe and provide a copy of the notices distributed to the state by July 1 of the following year.
- Each notice must include the following information, by rule:
  - A statement that the service line is lead, GRR, or of unknown material
  - An explanation of the health effects of lead as specified in the rule (new language)
  - Steps persons at the service connection can take to reduce exposure to lead in drinking water
  - Information about opportunities to replace (lead and GRR), programs to finance replacement (lead), and verify the service line material (unknown material)

Service Line Material Notices

- Service line material notices must be distributed annually, so replacing lead or GRR services lines, and/or confirming the material of unknown material services lines will reduce the number of notices required to be issued.
- Service line material notice templates are available on the Public Water Supply Section's website
  - https://www.deq.nc.gov/about/divisions/water-resources/drinking-water/lead-service-line-inventory
- Notices should be submitted to the Public Water Supply Section through our online ECERT application (https://pws.ncwater.org/ECERT/pages/default.aspx).
- Water systems with no lead, GRR, or unknown material services lines do not have to provide notices to customers, but they must still either make their inventory publicly accessible or provide a written statement declaring that the system is entirely composed of non-lead service lines and include a general description of the applicable sources used to make that determination.

Lead ALE Tier 1 Public Notification

- Now that the LCRR compliance date of October 16, 2024 has passed, water systems are now required to issue a Tier 1 public notification to customers if the 90th percentile lead level exceeds the lead action level of 0.015 mg/L (15 ppb).
  - As a reminder, a Tier 1 public notification requires the notice to distributed to customers within 24 hours of learning of the lead action level exceedance.
  - The notice can be delivered to customers by broadcast media (radio/television), posting in conspicuous locations through the service areas, and/or hand delivery to all persons served by the system.
- The Lead Action Level Exceedance Tier 1 Public Notice template is available on the Public Water Supply Section's website
  - https://www.deq.nc.gov/about/divisions/water-resources/drinking-water/lead-service-line-inventory.
- After delivering to customers, certified notice should be submitted via email to both pwss.lcr@deq.nc.gov and LeadALE@EPA.gov.A new module is currently under development within our web-based ECERT application for submission of these lead action level exceedance public notices, which will be available soon.

Revised Lead Health Effects Language

Lead Health Effects Language Under the Lead and Copper Rule (LCR)

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Lead Health Effects Language Under the Lead and Copper Rule Revisions (LCRR)

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

Consumer Confidence Report (CCR) Changes

- Mandatory language change
- Information about accessing the initial service line inventory
- Data table with range of tap results
  - If applicable: two six months monitoring data with 90th percentile
- Contact: Victoria Boudiette
  - 919-707-3894
  - victoria.boudiette@deq.nc.gov

Lead and Copper Rule Improvements (LCRI)

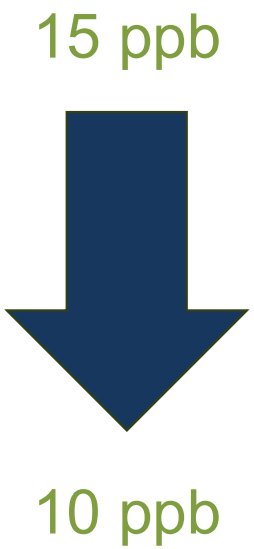
Lead and Copper Rule Improvements (LCRI)

- The final LCRI was published to the Federal Register on October 30, 2024.
- Compliance date for the LCRI is November 1, 2027.
- A general overview of the LCRI's requirements include:

- Lead Action Level Lowered
- Revised Tiering Criteria
- Monitoring Requirements and 90th Percentile Changes
- Corrosion Control Treatment (CCT) Changes
- Water Quality Parameter (WQP) Monitoring Changes
- Distribution System and Site Assessment (DSSA) Changes
- Small System Compliance Flexibility
- Public Education and Outreach Changes
- Consumer Confidence Report (CCR) Changes
- Baseline Service Line Inventory
- Inventory Validation
- Lead Service Line Replacement Plans
- School and Child Care Facility Sampling

Lead Action Level Lowered

- The final LCRI lowers the 90th percentile lead action level from 0.015 mg/L (15 ppb) under the current rule to **0.010 mg/L (10 ppb)** under the final rule.
- Compliance date for the new lead action level is November 1, 2027.
- The 90th percentile copper action level remains at 1.3 mg/L (1.3 ppm) under the final rule.



Revised Tiering Criteria

The tiering criteria for sample sites for Non-Transient Non-Community Water Systems (NTNCWS) and Community Water Systems (CWS) have been combined in the final LCRI:
Tier 1 – single family homes with premise plumbing made of lead and/or served by a lead service line.
Tier 2 – buildings, including multifamily homes, with premise plumbing made of lead and/or served by a lead service line.
Tier 3 – include single family homes that are either: • Sites served by a lead connectors • Sites served by a galvanized service line ever downstream of an LSL or lead connector, or • Sites with galvanized premise plumbing ever downstream of an LSL or lead connector.
Tier 4 – sites containing copper pipes with lead solder installed before the state lead ban (March 1987).
Tier 5 – sites that are representative of locations throughout the distribution system.

Monitoring Requirements

Lead and Copper Sampling

- Same number of required sample sites.

System size (Number of People Served)	Standard number of sites for lead and copper monitoring	Reduced number of sites for lead and copper monitoring
>100,000	100	50
10,001 to 100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
≤100	5	5

- Same timeframe for monitoring:
  - January – June and July – December (6-month monitoring)
  - June – September (Annual and 3-year monitoring)

Monitoring Requirements

Water Quality Parameter Monitoring

- All large and medium water systems with corrosion control treatment (unless deemed optimized) and all small and medium water systems that exceed the lead or copper action level must sample and monitor water quality parameters in addition to lead and copper.
- Sites that are selected for this sampling can be the same or different from the tap sampling sites chosen for lead and copper, but they must be included in the site sample plan.
- Samples to be collected at distribution taps (representing water quality throughout the distribution system) and entry point(s) to the distribution system.
- Parameters analyzed in samples: pH, alkalinity, orthophosphate (if used), silica (if used) and any additional parameters specified by the State.

System size (Number of people served)	Standard minimum number of sites for water quality parameters	Reduced minimum number of sites for water quality parameters
>100,00	25	10
10,001 to 100,000	10	7
3,301 to 10,000	3	3
501 to 3,300	2	2
101 to 500	1	1
≤100	1	1

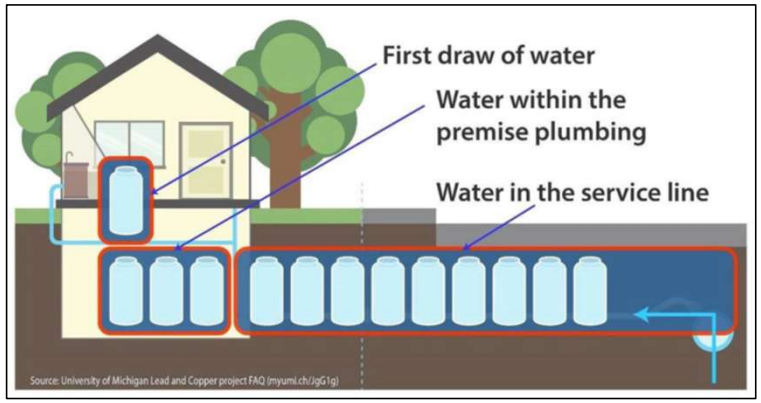
Monitoring Requirements

Monitoring Schedules

- Systems with known lead and/or GRR service lines in their inventory on November 1, 2027, must resume a standard monitoring schedule (every 6 months).
  - With the exception of systems that meet certain tap sampling requirements before the compliance date.
- Systems with no lead or GRR service lines in their inventory on November 1, 2027, can remain on reduced monitoring and must start standard monitoring if they identify a lead or GRR service line in the future.
- Thereafter, the monitoring schedule is based on the 90th percentile for lead and copper. Systems may retain or qualify for reduced monitoring based on the number of consecutive tap monitoring periods:
  - 90th percentile ≤ action level for 2 consecutive 6-month periods: Annual monitoring at standard number of sites for lead and reduced number of sites for copper.
  - 90th percentile < practical quantitation limit (PQL) for 2 consecutive periods: Triennial monitoring at the reduced number of sites for both lead and copper.

Monitoring Requirements

- Still a 1-liter sample after at least 6 hours of stagnation.
- Residential housing samples must still be collected from a kitchen or bathroom tap, and non-residential samples must still be collected from a tap typically used for consumption.
- 1st and 5th Liter Samples
  - For **ALL** sites, the 1st liter sample must be analyzed for lead and copper.
  - For **Tier 1 and 2 sites only**, a 5th liter sample must also be analyzed for lead (higher value used for 90th percentile calculation).



Monitoring Requirements

- Requirement for replacement sampling sites to be selected within reasonable proximity has been removed.

- Clarifies when sites are considered no longer available for sampling after customer refusal or nonresponse after two outreach attempts.
  - Customer refusal or nonresponse numbers must be submitted and certified by the State.

90th Percentile Calculation

- Calculation for systems with **sufficient** Tier 1 and 2 sites to meet the minimum number of required sample sites.
  - For **lead**, use the higher result from the 1st or 5th liter for each site. Calculate the 90th percentile as normal.
  - For **copper**, use the 1st liter result for all sites and calculate the 90th percentile as normal.
  - Cannot use any samples collected from Tier 3, 4, or 5 sites in this calculation.
- Calculation for systems with **insufficient** Tier 1 and 2 sites to meet the minimum number of required sample sites.
  - For **lead**, use the higher result from the 1st or 5th liter for each Tier 1 and 2 site and the highest samples from Tier 3, 4, or 5 until minimum is met. Calculate the 90th percentile.
  - For **copper**, use all 1st liter samples from Tier 1 and 2 sites first, then highest samples from Tier 3, 4, or 5 until minimum is met. Calculate the 90th percentile.
  - Any remaining Tier 3, 4, or 5 samples cannot be included in the 90th percentile calculations.
- For systems with only Tier 3, 4, or 5 sites, all lead and copper samples must be included in the 90th percentile calculation.
- For systems with fewer than five samples, the highest concentration is considered the 90th percentile.

Corrosion Control Treatment (CCT)

With Corrosion Control Treatment	Without Corrosion Control Treatment
Step 1: Initiate mandatory pipe rig/loop or CCT study or treatment recommendation	Step 1: Initiate mandatory pipe rig/loop or CCT study or treatment recommendation
Step 2: State requires CCT study or State designates re-optimized OCCT	Step 2: State requires CCT study or State designates re-optimized OCCT
Step 3: Any system with lead lines exceeding lead levels must complete pipe/rig loop CCT study and recommend re-optimized OCCT within 30 months	Step 3: Study duration
Step 4: State designation of re-optimized OCCT based on CCTS results	Step 4: State designation of OCCT based on CCT study results
Step 5: Install re-optimized OCT within 1 year after step 4	Step 5: OCCT installation deadlines. Systems must install OCCT within 24 hours after State designates OCCT
Step 6: Standard monitoring for two monitoring periods and WQP monitoring	Step 6: Follow-up monitoring
Step 7: State sets OWQPs. State reviews systems re-optimized OCCT and designates OWQPs	Step 7: State sets OWQPs
Step 8: Systems meet OWQPs to demonstrate compliance	Step 8: Systems meet OWPS to demonstrate compliance

Corrosion Control Treatment (CCT)

System Size	Tap Sample Results	Systems with Existing CCT	System without Existing CCT
Large (> 50,000)	90th percentile Pb > AL	Must do corrosion control study (CCS); systems with lead service lines (LSLs) must conduct harvested pipe rig/loop study	Must do CCS; systems with LSLs must conduct harvested pipe rig/loop study
	90th percentile Cu > AL	Must do CCS	Must do CCS
	90th percentile Pb > PQL (5 µg/L) but ≤ AL	State may require a CCS	Must do CCS
Medium (10,000 – 50,000)	90th percentile Pb > AL	Systems with LSLs must conduct harvested pipe rig/loop study; state may require systems without LSLs to conduct a CCS	Systems with LSLs must conduct harvested pipe rig/loop study; state may require systems without LSLs to conduct a CCS
	90th percentile Cu > AL	State may require a CCS	State may require a CCS

Corrosion Control Treatment (CCT)

For Systems that Exceed the 90th Percentile Lead Action Level (0.010 mg/L or 10 ppb)

- Without CCT
  - Must install CCT regardless of subsequent 90th percentile levels if CCT installation has started.
- With Optimized Corrosion Control Treatment (OCCT)
  - Systems with OCCT and with lead and/or GRR service lines and are meeting Optimal Water Quality Parameters (OWQPs) need only re-optimize OCCT once after the compliance date.
  - Systems with OCCT that exceed the 90th percentile lead action level after removing all lead and/or GRR service lines will need to re-optimize again.
  - Systems may be required to re-optimize if required by the State at any time, including from a modification of a State treatment determination of OCCT or upon adding a new source or long-term treatment change.

Corrosion Control Treatment (CCT)

- Systems with lead and/or GRR service lines can defer installing or re-optimizing OCCT if they replace 100% of their lead and GRR service lines within 5 years or less from the date they are triggered into CCT steps (must maintain CCT during 5-year period).
- Calcium carbonate stabilization option for CCT removed.
- Phosphate inhibitor must be orthophosphate.
- Identifies systems that need to conduct a harvested pipe rig study.
  - Large or medium systems with lead service lines and exceed the 90th percentile lead action level must harvest lead service lines from their distribution system and construct a flow through pipe rig, operating the rig with finished water.
  - After completing the pipe rig study, the system must recommend OCCT to the State based on the results of the study.

Water Quality Parameter (WQP) Monitoring

- Systems with CCT (unless deemed optimized) serving > 10,000 persons must conduct regular WQP monitoring at entry points and within the distribution system.
- Systems serving ≤ 10,000 persons and systems without CCT serving > 10,000 persons but ≤ 50,000 persons that exceed the lead and/or copper action level(s) must conduct WQP monitoring until they no longer exceed lead and/or copper action level(s) for 2 consecutive 6-month monitoring periods.
- Systems without CCT serving > 10,000 persons but ≤ 50,000 persons that exceed the lead action level that are required to install CCT must continue to conduct WQP monitoring.

Distribution System and Site Assessment (DSSA)

- Changes the name from “Find-and-Fix” to “Distribution System and Site Assessment” to describe this requirement more precisely.
- Requirements for systems with individual tap samples > 0.010 mg/L lead:
  - Conduct WQP monitoring at or near the site > 0.010 mg/L.
  - Collect tap sample at the same tap sample site within 30 days.
    - For lead service lines, collect any liter or sample volume.
  - Perform needed corrective action.
  - Document customer refusal or non-response after 2 attempts.
  - Provide information to local and State health officials.
- Clarifies that the distribution system sample location must be within a half mile radius of each site with a result > 0.010 mg/L.
- Water systems without CCT are not required to collect WQP samples for the DSSA CCT assessment.

Small System Compliance Flexibility

- Allows CWSs serving ≤ 3,300 persons and all NTNCWSs with 90th percentile levels > lead action level and ≤ copper action level to choose the following actions in lieu of CCT requirements to address lead with State approval:
- Choose a compliance option: (1) provision and maintenance of Point of Use (POU) devices or (2) replacement of all lead-bearing plumbing materials.
- Removes the compliance option under LCRR to conduct LSLR in 15 years. Otherwise, the system must meet the following CCT requirements:
- With CCT: Collect WQPs and evaluate compliance options and OCCT.
- No CCT: Evaluate compliance options and CCT.

Public Education and Outreach

- Water systems must deliver consumer notice of lead and copper tap sampling results to consumers whenever their tap is sampled as soon as practicable but no later than 3 business days after receiving the results, regardless of the level.
- 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. Water systems must submit a filter distribution plan to the State within 60 days of the second action level exceedance, and the State will have 60 days to review it. The State has discretion to allow the system to discontinue outreach activities and filter provision earlier if it completes actions to reduce lead levels.
- Water systems must offer to sample the tap for lead for any consumer with a lead, GRR, or unknown service line who requests it.

Consumer Confidence Report (CCR) Information

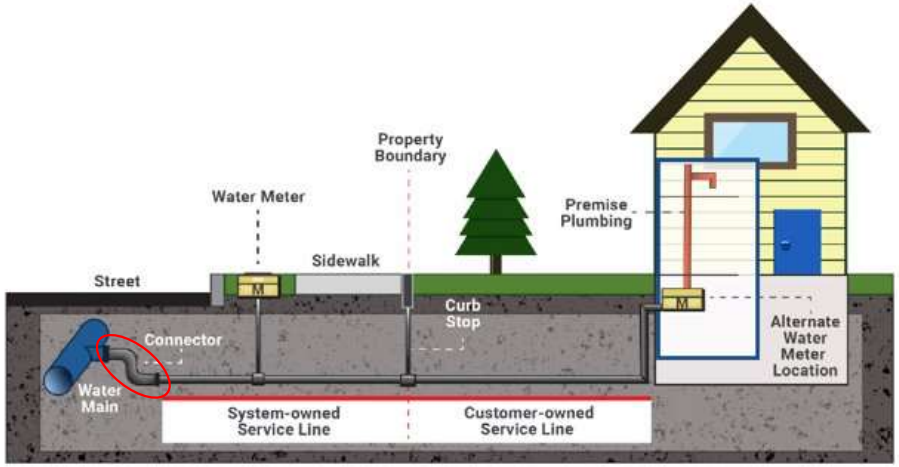
- Revises the mandatory lead health effects language and informational statement as well as includes additional information about risk of lead exposure in the informational statement about lead in the CCR to improve completeness and clarity.

- Community Water Systems (CWSs) must include a statement in the CCR about the system sampling requirements for lead in schools and childcare facilities and direct the public to contact their school or childcare facility for further information.

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

Baseline Service Line Inventory

- An updated inventory, referred to as the “baseline inventory”, must include the material of connectors in addition to the service line materials, regardless of ownership status.
- The LCRI defines a connector as 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.
- Baseline inventories are due on the LCRI compliance date of November 1, 2027.



Baseline Service Line Inventory

- Connectors must be classified as one of the following material within the baseline inventory:
  - Lead
  - Unknown
  - No Connector Present
  - Non-Lead
- The baseline inventory and all subsequent annual updates must include the following:
  - Number of each type of service line
  - Number of lead and unknown connectors
  - Number of full lead and GRR service line replacements in past year
  - Number of partial lead and GRR service line replacements in past year
  - Street address when available

Baseline Service Line Inventory

- Just like the initial service line inventory, the baseline inventory must be made publicly accessible; and available online for systems serving greater than 50,000 people.

- Systems must respond to customer inquiries on incorrect material categorizations within 60 days.

- Systems must identify all unknown service lines by the applicable mandatory replacement deadline.

Inventory Validation

- Systems must validate their methods to categorize non-lead service lines in their baseline inventory by December 31, 2034.
- The validation pool includes all non-lead service lines except:
    1. Those installed after Federal, State, or local lead ban
    2. Those visually inspected at a minimum of two points on the pipe exterior
    3. Those previously replaced
- Systems may submit previous validation efforts in lieu of the LCRI requirements if they are at least as stringent as the requirements (State discretion)

Lead Service Line Replacement Plans

- Systems with lead, GRR, or unknown material service lines must develop a replacement plan by the LCRI compliance date of November 1, 2027. Required elements of the replacement plan include:
  - Publicly accessible inventory (available online for systems serving >50,000 persons).
  - The publicly available inventory must have locational identifier for each lead/GRR service line.
  - Strategy to inform customers and consumers about the plan and replacement program.
  - Identify legal requirements or water tariff agreement provisions that affect a system's ability to gain access for full service line replacement.
  - Annually the plan must be revised with new/updated information and be submitted to the State.

- Replacement plan must include additional elements if the system has one or more lead-lined galvanized service lines or if the system is eligible for a deferred deadline.

Lead Service Line Replacement Plans

- By the LCRI compliance date of November 1, 2027, systems planning to use deferred deadlines must include earliest deadline and fastest feasible rate to replace lead and GRR.
- No slower than 39 annual replacements per 1,000 service connections.
- By December 31, 2029, the State is required to determine if systems with a deferred deadlines are replacing service lines at the fastest feasible rate.
- Every three years, in addition to annual updates, systems with deferred deadlines must update why the replacement rate is still the fastest feasible.

Lead Service Line Replacement Plans

- Replacement requirements are independent of a system's 90th percentile lead level.
- All CWSs and NTNCWSs must replace lead and GRR under their control within 10 years unless deferred.
- Systems must replace service lines at a cumulative average annual rate of 10 percent, unless subject to a shortened or deferred deadline.
- Cumulative average replacement rate is applied to the total number of unknown, lead, and GRR service lines in the baseline inventory minus the number of unknown service lines that have been determined to be non-lead since the baseline inventory.

Lead Service Line Replacement Plans

- Systems required to annually replace more than 39 service lines per 1,000 connections are eligible for deferred deadlines longer than 10 years.
- States required to shorten deadline for systems where a shorter deadline is feasible.
- Where property owner consent is required to access the service line, systems must make a “reasonable effort” (at least 4 attempts) to engage property owners.
- Partial replacements are prohibited except for:
  - Emergency repairs
  - Infrastructure projects that impact service lines where the system does not have control
- Systems conducting partial service line replacement, must make a “reasonable effort” to engage property owners about full service line replacements and offer to replace the remaining portion of the service line not under their control within 45 days if replaced in coordination with an emergency repair.

Lead Service Line Replacement Plans

Service Line Replacement Related Outreach

- Provide annual notification to customers and all persons served by the water system at the service connection with a lead, GRR, or unknown material service line.

- Provide notice and educational materials during water-related work that could disturb lead, GRR, or unknown service lines, including disturbances due to inventorying efforts, to consumers within 24 hours or before the service line is returned to service, and to customers within 30 days.

- Provide filters to consumers for disturbances to a lead, GRR, or unknown material service lines caused by replacement of an inline water meter, water meter setter, connector, or water main.

- If CWS does not meet the mandatory replacement rate they must conduct additional public outreach activities to encourage customers with lead, GRR, and unknown service lines to participate in the service line replacement program.

School and Childcare Facility Sampling

- All CWSs must make a list of the schools and licensed childcare facilities they serve and submit to the State by November 1, 2027.
  - Excludes schools and licensed childcare facilities constructed or that had full plumbing replacement on or after January 1, 2014 and are not served by a lead, GRR, or unknown material service line.
- All CWSs must conduct annual public education in the schools and childcare facilities on the list.

School and Childcare Facility Sampling

- All CWSs must sample in all the elementary schools and licensed childcare facilities they serve within the first five-year testing cycle and sample secondary schools on request. Thereafter, CWSs must sample the schools and childcare facilities they serve on request.
- Includes sampling waivers for alterative State and local sampling programs that meet specific conditions.
- Includes waivers for CWSs to sample in schools and licensed childcare facilities they serve during the first five-year testing cycle if the facility has been sampled between January 1, 2021, and November 1, 2027.

Key Compliance Date Items - November 1, 2027

- Baseline Service Line Inventory
- Lead Service Line Replacement Plan
- Updated Lead and Copper Sampling Plan
- List of Schools and Childcare Facilities for Community Systems
- Compliance with Lowered Lead Action Level (0.010 mg/L)
- Start Distribution System and Site Assessment (DSSA)

Lead and Copper Team Contact Information

Lead and Copper Team Email: pwss.lcr@deq.nc.gov

Lead and Copper Team Members

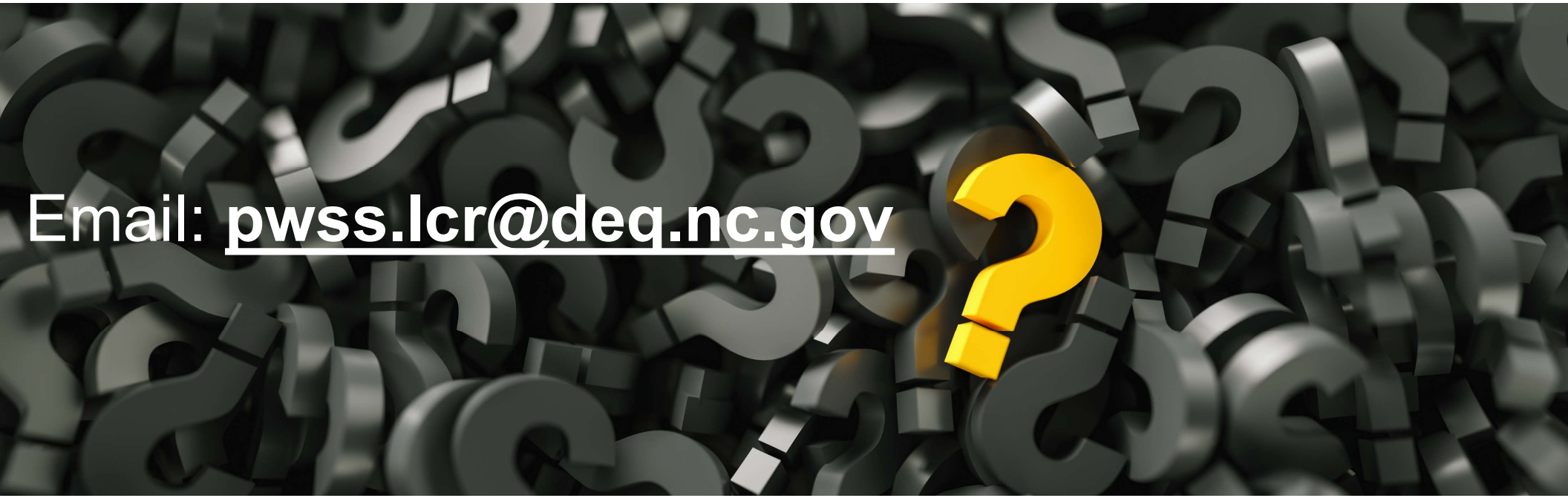
Bethany Goodwin (bethany.goodwin@deq.nc.gov)
- (919) 707-9079
- Environmental Program Consultant

Stephanie Galindo(stephanie.galindo@deq.nc.gov)
- (919) 707-9068
- Environmental Program Consultant

Noah Barnett (noah.barnett@deq.nc.gov)
- (919) 707-9118
- Rule Manager - Mooresville, Wilmington, and Winston-Salem Regions

Jim Coor (jimmy.coor@deq.nc.gov)
- (919) 707-9072
- Rule Manager - Asheville, Fayetteville, Raleigh, and Washington Regions

Questions?



Email: **pwss.lcr@deq.nc.gov**

Thank you!