

# ADEM Lead and Copper Update

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# Today's Topics

- Current State of Affairs with Lead & Copper, Lead Service Lines (LSLs)
  - Sampling Requirements
  - Lead & Copper Rule Revisions (LCRR)
  - Initial LSL Inventories
  - Lead Testing in Child Care Facilities and Schools
- Looking Ahead with Lead & Copper Rule Improvements (LCRI)
  - Baseline LSL Inventories
  - LSL Replacement
  - New Sample Plans
  - Other Updates
- Summary – Short Term Timetable



# Current State of Affairs

## What's Happening Right Now with Lead & Copper



# Timeline of Key Events with Lead & Copper

- **Original Lead & Copper Rule (LCR)**
  - Promulgated by EPA in 1991
- **Flint Michigan Water Crisis**
  - April 2014 – October 2015
- **Lead & Copper Rule Revisions (LCRR)**
  - Announced by EPA on January 15, 2021
- **Lead & Copper Rule Improvements (LCRI)**
  - Announced by EPA on October 8, 2024
  - Enhances/replaces most LCRR requirements
  - **Compliance Date – November 1, 2027**



# Primacy



EPA currently maintains primacy over LCRR/LCRI.



Until ADEM receives primacy, ADEM will administer the rule, but any formal enforcement would be carried out by EPA directly.



ADEM will continue to enforce the LCR promulgated in 1991 and codified in the Division 7 regulations except for the Service Line Inventory, ALE requirements, and Public Notification/Education materials.

# Lead & Copper Rule – What Hasn't Changed

- Sampling Requirements:

| TABLE 11-1<br>LEAD/COPPER MONITORING SITES | | |
|---|---|---|
| **Population** | **Initial Monitoring Sites** | **Reduced Monitoring Sites** |
| > 100,000 | 100 | 50 |
| 10,001-100,000 | 60 | 30 |
| 3,301-10,000 | 40 | 20 |
| 501-3,300 | 20 | 10 |
| 101-500 | 10 | 5 |
| ≤ 100 | 5 | 5 |

ADEM Admin. Code 335-7-11-.06

- Sampling Frequency
  - Initial, Routine Monitoring = Every 6 months
  - Reduced Monitoring = Annually or Triennially

ADEM Admin. Code 335-7-11-.05



# Lead & Copper Rule – What Hasn't Changed

- **LSL Sampling & Reporting**
  - ≥50% (or as many as available if unable to reach 50%) of samples must be taken **from** lead service lines if lead services are within the system.
  - Within 10 days following the monitoring period, ADEM must receive the results of tap monitoring, Form #405, and an example of what was delivered to the customers who did the monitoring.
- **Lead action level remains 0.015 mg/L, 90$^{th}$ percentile until November 1, 2027**



# Lead and Copper Rule Revisions (LCRR) – Effective October 16, 2024

**Initial Service Line Inventory**

- LCRI 40 CFR § 141.84(a)
- Submissions were due 10/16/2024
- Still effective under Lead and Copper Rule Improvements (LCRI)
- Initial review has been completed
- Final reviews are ongoing - The Department will be contacting systems for any required changes.



# Initial LSL Inventories – Definitions (CFR §141.2 & §184.84(a)(3))

- **Non-lead SL**
- **Lead SL**
  - SL made of lead or a portion of the SL is made of lead
- **Galvanized SL Requiring Replacement (GRR)**
  - SL made of iron or steel that has been dipped in zinc to prevent corrosion or rusting & is downstream of an LSL
- **Unknown SL**
  - SL material is not known to be lead, GRR, or non-lead

# Inventory Data

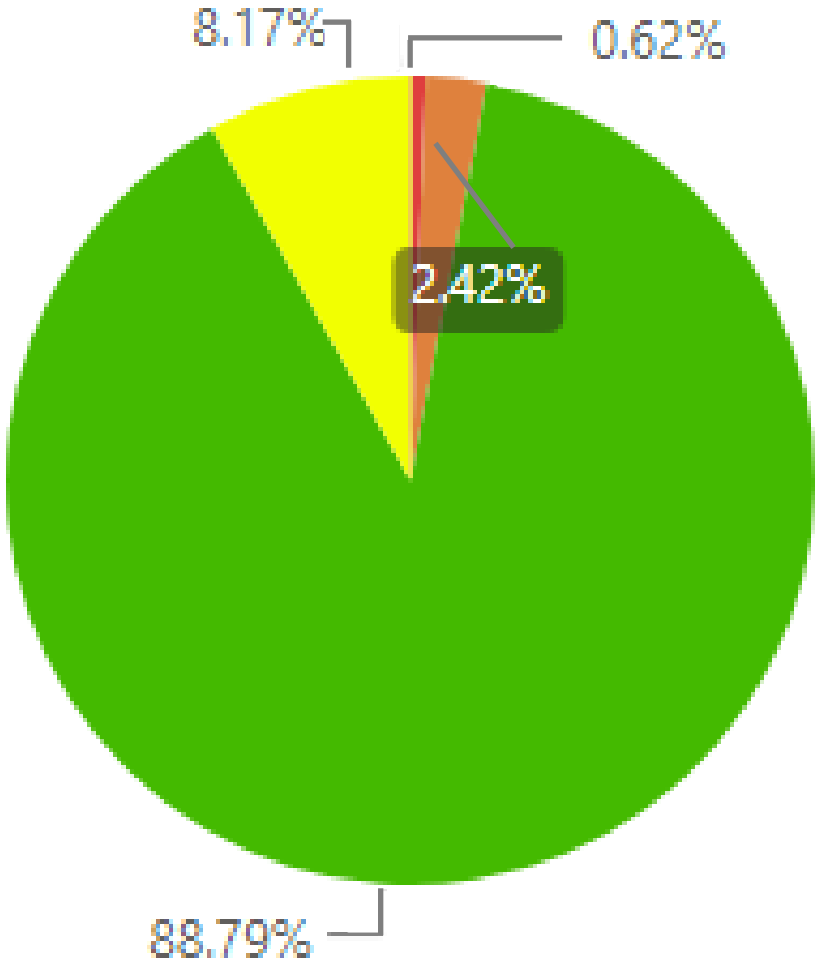
2,285,827
Total Lines Tabulated

14,079
Lead

55,396
Galv. Req. Replacement

186,829
Unknown

2,029,523
Non-Lead




**Data as of 9/27/2026**



# Three Categories for SLI Submissions

1. The system **does not** submit a satisfactory SLI Template as well as a completed SLI Certification Form
2. The system submits a satisfactory SLI Template as well as a completed SLI Certification Form and:
   - **Does not have** lead service lines, GRR service lines, Unknown service lines, Lead connectors, Unknown connector materials
3. The system submits a satisfactory SLI Template as well as a completed SLI Certification Form and:
   - **Has** lead service lines, GRR service lines, Unknown service lines, Lead connectors, Unknown connector materials



# Satisfactory SLI Submission with Lead, GRR, & Unknowns

- Prior to November 15, 2024 (30 days after 10/16/2024 SLI due date), the Water System was required to notify all persons served by a lead, GRR, or unknown service line that the Service Line is known to or may potentially contain lead.
- The notification will repeat annually until the service is no longer Lead, GRR, or unknown
- Instructions to access the inventory must be included in the CCR. (Water systems serving over 50,000 must be accessible online)

# Customer Notification Certification

**CERTIFICATION OF DELIVERY FOR THE CONSUMER NOTIFICATION OF LSL AND OF LSL INFORMATION MATERIALS**

**PWS NAME:** _____ **PWS ID No.:** _____

It is the intent of this water system to certify that it has delivered the annual consumer notification and delivered lead service line information materials to affected consumers with a lead, galvanized requiring replacement, or lead status unknown service line in accordance with § 141.85(e) for the previous calendar year of: _____.

**CERTIFIED BY:**

**Name:** _____ **Title:** _____

**Address or Phone No.:** _____

By signing below the respondent identified above herby certifies that the water system has complied with the consumer notification of lead service line materials as specified in § 141.85(e).

**Signature:** _____ **Date:** _____

Systems that **do not have** lead, galvanized requiring replacement (GRR) or unknowns do not have to submit the certification form.



# Satisfactory SLI Submission with ZERO Lead, GRR, & Unknowns

- Any water system that has no lead, GRR, or unknowns is not required to maintain a ***publicly*** accessible inventory. Instead, the Water system may issue a written statement declaring the system is free of lead - CFR § 141.84(a)(6)
- If a water system claiming to be totally non-lead, finds lead, GRR service lines, or lead connectors while performing planned or unplanned work on the system, it must report the findings to the State within 60 days of discovery - CFR § 141.84(b)(1)(ii)
- The water system will still have to include a statement in the CCR that states there was no Lead, GRR, or Unknowns in their inventory - CFR § 141.84(a)(7)



# Public Notification Guidance

EPA has produced guidance and templates for the following required notices:

- **Notification of Known or Potential Service Line Containing Lead**
  - 30-Day Notice of Service Line Material
- **Tier 1 (!!) Public Notice for Lead Action Level Exceedance**
  - 24-Hour Notification of Action Level Exceedance

https://www.epa.gov/dwreginfo/lead-and-copper-rule-implementation-tools



# Tier 1 Public Notice for Lead ALE

- Starting October 16, 2024, Action Level Exceedances (ALEs) requires materials to be supplied to all persons served by the Water System as soon as possible but no more than 24 hours after learning of the ALE.
- Public Notification and Education Materials as well as templates can be found on the EPA website.

www.epa.gov/dwreginfo/lead-and-copper-rule-implementation-tools



# Lead ALE – Prepare Beforehand

- Due to the 24-hour timeframe that is required for the public notice following a lead action level exceedance, systems are encouraged to plan ahead for the best method of distribution of the notice for their system should they have an ALE.

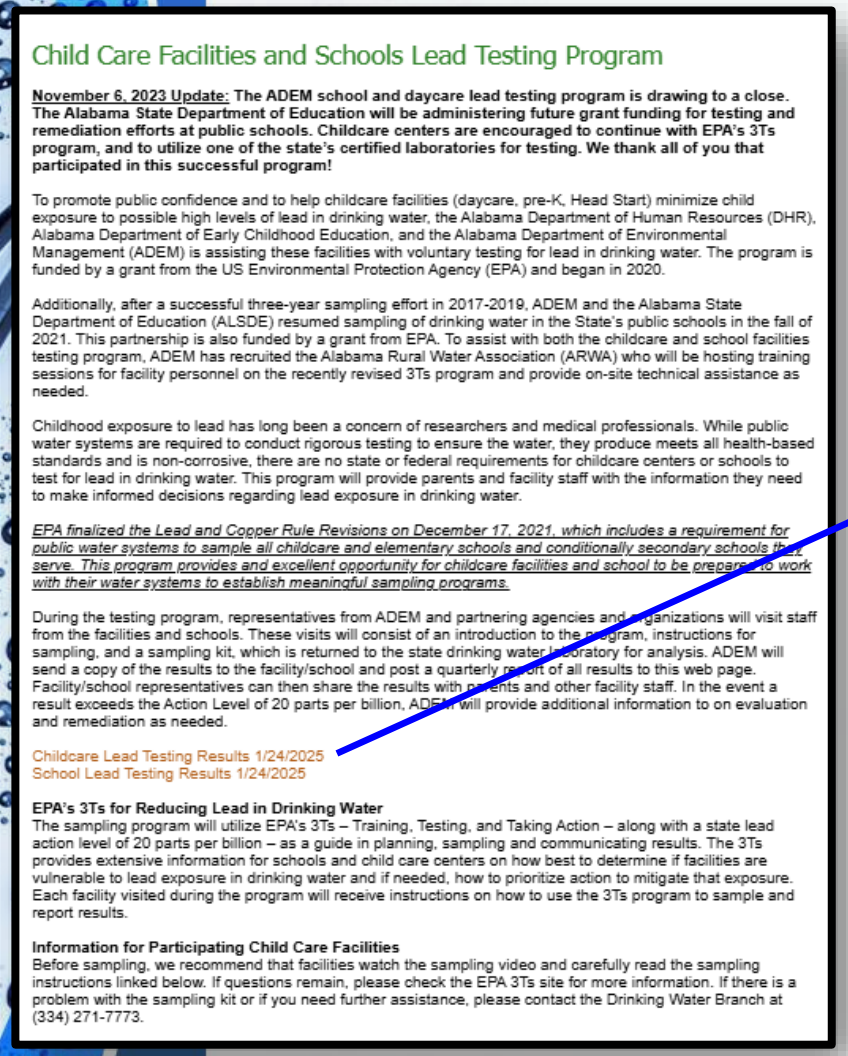
- After November 1, 2027 the frequency of lead ALE's is expected to increase.



# Lead Testing in Childcare Facilities and Schools

- The free testing program provided by the Department finished on September 30, 2025.
- Waivers for completed sampling may be available after ADEM receives primacy over LCRI.
- All sampling data the department has received is on the ADEM Website.
- Compliance date for monitoring begins **November 1, 2027**.

# Lead Testing in Childcare Facilities and Schools



## Child Care Facilities and Schools Lead Testing Program

**November 6, 2023 Update: The ADEM school and daycare lead testing program is drawing to a close. The Alabama State Department of Education will be administering future grant funding for testing and remediation efforts at public schools. Childcare centers are encouraged to continue with EPA's 3Ts program, and to utilize one of the state's certified laboratories for testing. We thank all of you that participated in this successful program!**

To promote public confidence and to help childcare facilities (daycare, pre-K, Head Start) minimize child exposure to possible high levels of lead in drinking water, the Alabama Department of Human Resources (DHR), Alabama Department of Early Childhood Education, and the Alabama Department of Environmental Management (ADEM) is assisting these facilities with voluntary testing for lead in drinking water. The program is funded by a grant from the US Environmental Protection Agency (EPA) and began in 2020.

Additionally, after a successful three-year sampling effort in 2017-2019, ADEM and the Alabama State Department of Education (ALSDE) resumed sampling of drinking water in the State's public schools in the fall of 2021. This partnership is also funded by a grant from EPA. To assist with both the childcare and school facilities testing program, ADEM has recruited the Alabama Rural Water Association (ARWA) who will be hosting training sessions for facility personnel on the recently revised 3Ts program and provide on-site technical assistance as needed.

Childhood exposure to lead has long been a concern of researchers and medical professionals. While public water systems are required to conduct rigorous testing to ensure the water, they produce meets all health-based standards and is non-corrosive, there are no state or federal requirements for childcare centers or schools to test for lead in drinking water. This program will provide parents and facility staff with the information they need to make informed decisions regarding lead exposure in drinking water.

*EPA finalized the Lead and Copper Rule Revisions on December 17, 2021, which includes a requirement for public water systems to sample all childcare and elementary schools and conditionally secondary schools they serve. This program provides and excellent opportunity for childcare facilities and school to be prepared to work with their water systems to establish meaningful sampling programs.*

During the testing program, representatives from ADEM and partnering agencies and organizations will visit staff from the facilities and schools. These visits will consist of an introduction to the program, instructions for sampling, and a sampling kit, which is returned to the state drinking water laboratory for analysis. ADEM will send a copy of the results to the facility/school and post a quarterly report of all results to this web page. Facility/school representatives can then share the results with parents and other facility staff. In the event a result exceeds the Action Level of 20 parts per billion, ADEM will provide additional information to on evaluation and remediation as needed.

Childcare Lead Testing Results 1/24/2025
School Lead Testing Results 1/24/2025

**EPA's 3Ts for Reducing Lead in Drinking Water**
The sampling program will utilize EPA's 3Ts – Training, Testing, and Taking Action – along with a state lead action level of 20 parts per billion – as a guide in planning, sampling and communicating results. The 3Ts provides extensive information for schools and child care centers on how best to determine if facilities are vulnerable to lead exposure in drinking water and if needed, how to prioritize action to mitigate that exposure. Each facility visited during the program will receive instructions on how to use the 3Ts program to sample and report results.

**Information for Participating Child Care Facilities**
Before sampling, we recommend that facilities watch the sampling video and carefully read the sampling instructions linked below. If questions remain, please check the EPA 3Ts site for more information. If there is a problem with the sampling kit or if you need further assistance, please contact the Drinking Water Branch at (334) 271-7773.

Childcare Lead Testing Results 1/24/2025
School Lead Testing Results 1/24/2025

**Results are available on the website:**

**https://adem.alabama.gov/water/drinking-water-branch/child-care-facilities-and-schools-lead-testing-program**

# ADEM SRF funding is still available for Lead Service Line Replacement!!!

- Alex Chavers – SRF Chief
  - 334-271-7805
  - adchavers@adem.alabama.gov
  - srf@adem.alabama.gov

https://adem.alabama.gov/water/state-revolving-fund-srf



# Looking Ahead w/ LCRI

## What's Coming Down the Pipe



# Lead & Copper Rule Improvements (LCRI)

## Compliance Date – November 1, 2027:

- **Initial lead service line requirements still effective**
  - Due October 16, 2024
- **Lead action level lowered: 15 ppb to 10 ppb (!!!)**
  - Effective November 1, 2027
- **Action Level Exceedances now Tier 1, require 24-hour public notice**
  - Use EPA templates, Effective October 2024
- **All educational & public notice materials for LSL inventories**



# Compliance with the LCRI: Baseline Inventories

- **Baseline SL inventories due November 1, 2027**
  - 40 CFR § 141.84(a)(2)
  - Updating the initial inventory
  - Includes connectors in addition to service line materials
  - Connectors shall be identified as lead, non-lead, unknown, or “no connector present”
  - Have to submit to The Department annually until system is free of any lead materials in distribution system



# Compliance with the LCRI: Baseline Inventories

**40 CFR § 141.84(b)(ii):**

- If an LSL, GRR, or lead connector is discovered, the system must:
  - notify the customer within 30 days
  - notify the state within 60 days
  - update its inventory.



# Compliance with the LCRI: LSL Replacement Plan

- Due **November 1, 2027** - 40 CFR § 141.84(c)
- Required if at least one service line classified as lead, GRR, or unknown exists in system
- Required components can be found in 40 CFR § 141.84(c)(1)
- Must be publicly accessible if population > 50,000
- Must be updated annually & submitted to The Department annually until no lead materials exist in the distribution system



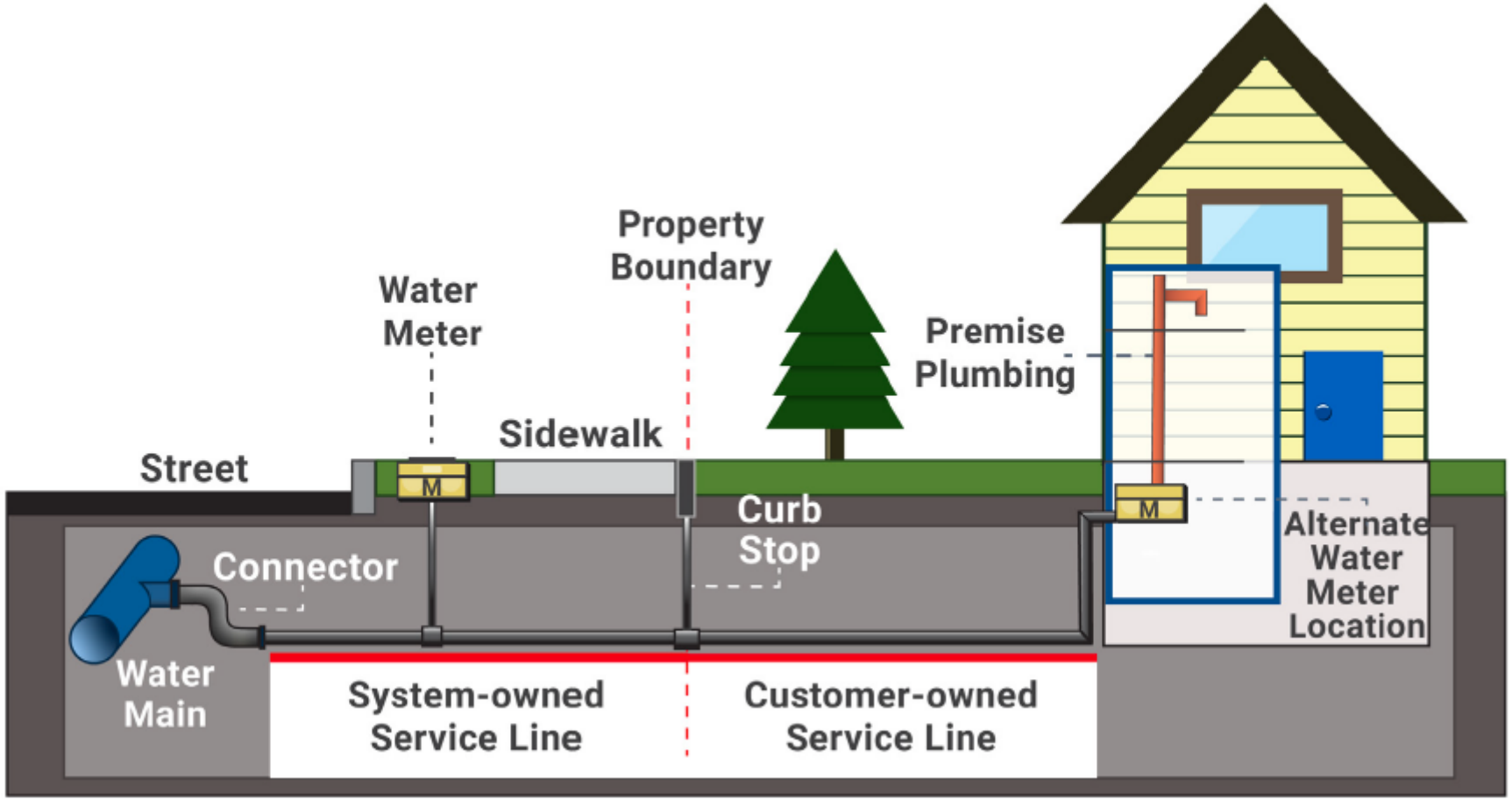
# Compliance with the LCRI: LSL Replacement

- All lead service lines & GRR and materials must be replaced in the system 10 years from the compliance date, which corresponds to:

- **November 1, 2037**

- 40 CFR § 141.84(d)(4) and § 141.83(d)(4)

# What if there are issues replacing the customer side of the meter?




https://www.epa.gov/system/files/documents/2023-06/EPA-Factsheet-Combined-06072023 508-final.pdf



# 40 CFR § 141.84(d)(2)

(2) Where a water system has access (*e.g.*, legal access, physical access) to conduct full service line replacement, the service line is under its control, and the water system must replace the service line. Where a water system does not have access to conduct full service line replacement, the water system is not required by this subpart to replace the line, but the water system must document the reasons that the water system does not have access and include any specific laws, regulations, and/or water tariff agreements that affect the water system's ability to gain access to conduct full replacement of lead and galvanized requiring replacement service lines. The water system must provide this documentation to the State pursuant to § 141.90(e)(10).

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-141/subpart-I/section-141.84

**Document the reasons why the full LSL cannot be replaced & submit to The Department**



# 40 CFR § 141.84(d)(3)

**Water System must make "reasonable effort" with property owner if owner consent is required:**

**"Reasonable effort" = at least four attempts to engage the property owner**

- In-person conversations
- Phone calls
- Text Messages
- Emails
- Letters & postcards



# Compliance with the LCRI: Sampling Site Plans

- Must be updated & submitted by **January 1, 2028**

- Definition of Tiers has changed
  - 40 CFR § 141.86(a)(4)



# LCRI Monitoring Plan Tiers

- Tier 1: Single-Family structures served by a LSL
- Tier 2: Multi-Family structures served by a LSL
- Tier 3: Single-Family structures served by a GRR or lead connectors
- Tier 4: Single-Family structures with copper plumbing with lead solder installed prior to January 1, 1983
- Tier 5: Single-Family structures with plumbing materials that are non lead/copper & are common with most households throughout the system

# Lead & Copper Rule Improvements (LCRI) Sampling Requirements

- **Water shall remain stagnant for at least 6 hours**
- **Collect 1st & 5th liter samples in residences served by LSLs**
  - Higher result used between the two samples





# LCRI: Water Quality Parameter (WQP) Monitoring

- 40 CFR § 141.87
- List of Tap Sampling Sites for WQPs shall be submitted to The Department by **January 1, 2028**.
- Required with a population > 10,000 while utilizing corrosion control treatment (CCT)
- Systems < 10,000 must conduct WQP monitoring with an ALE for at least two 6-month periods until there is no ALE
- Systems > 10,000 and < 50,000 without CCT must conduct WQP for at least two 6-month periods while there is no ALE & must install CCT



# LCRI & Schools/Daycares

- 40 CFR § 141.92

- All Community Water Systems must provide a list of schools/licensed day-cares they serve to The Department by **November 1, 2027**

- Excludes facilities that meet the following requirements:
  - Constructed or had a full plumbing replacement after January 1, 2014, AND
  - Are not served by a lead, GRR, or unknown service line



# LCRI & Schools/Daycares

- Must conduct annual public education & outreach to facilities on the list
- Must sample all facilities on the list within the first five-year cycle
- Afterwards, sample upon request



# Summary - Short Term Timetable

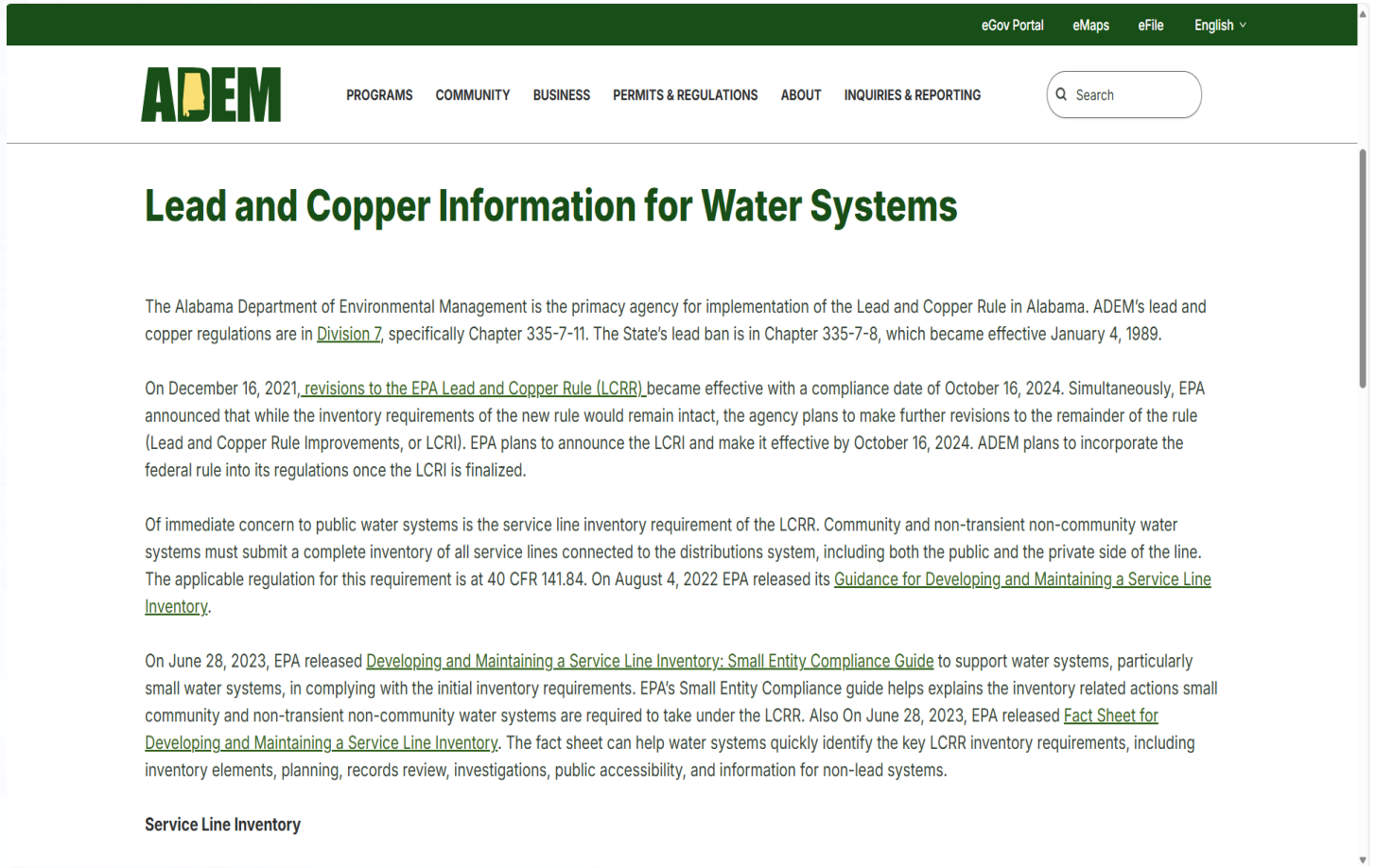
- **July 1, 2027**
  - Certification for 2026 LSL Consumer Notifications
- **November 1, 2027**
  - Base Line Inventory Due
    - Connectors and Changes
    - Work on Unknowns!
  - Service Line Replacement Plan (SLRP) Due
  - Schools and Daycares
    - Full List Due
    - Compliance Monitoring Begins for Next 5 Years
  - Lead ALE Changes to 10 ppb



# Summary – Short Term Timetable

- **December 1, 2027**
  - Complete Baseline Inventory Consumer Notifications
- **January 1, 2028**
  - New LAC Sampling Plan
    - 5 New Tiers
    - 1st and 5th Draw Sampling Protocol
    - 10 ppb Lead Action Level
  - Water Quality Parameter (WQP) – Sampling Sites
- **January 30, 2028**
  - Certification for Baseline LSL Consumer Notifications

# ADEM Lead & Copper Web Page




https://adem.alabama.gov/programs/water/drinkingwater/leadcopper.cnt



# EPA Fact Sheets

**Lead and Copper Rule Improvements: Supporting Materials | US EPA**

https://www.epa.gov/dwreginfo/lead-and-copper-rule-improvements-supporting-materials

**Lead and Copper Rule Implementation Tools | US EPA**

https://www.epa.gov/dwreginfo/lead-and-copper-rule-implementation-tools



# Questions?

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