

North Central Texas Council of Governments

LCRR (Lead and Copper Rule Revisions) 102 - Taking Inventory One Year Later

NCTCOG Webinar May 22, 2023

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Prepared in cooperation with the Texas Commission on Environmental Quality and U.S. Environmental Protection Agency







Procedures for Webinar

The webinar is being recorded and will be posted to NCTCOG's website under the green banner called "Webinars" here:

https://www.nctcog.org/envir/natural-resources/water-resources

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- ▶ Please keep your microphone on mute until the Questionand-Answer period at the end of each presentation.
- ► Thank you!

Webinar Agenda

- LCRR 102
 - ► Laura Higgins, TCEQ



- ▶ Update on Preparations for Compliance by October 16, 2024
 - ► Stacy Walters, City of Fort Worth
- From Historical Record Review to Inventory, LCRR Compliance Efforts in Irving
 - ► Robert Archer, City of Irving
- Update on Preparations for LCRR Public Outreach and Risk Communication
 - ► Mary Gugliuzza, City of Fort Worth

Speaker Introduction

Laura Higgins

- ► Team Leader, Lead and Copper Monitoring Team
- ► Texas Commission on Environmental Quality (TCEQ)

Lead and Copper Rule Revisions (LCRR) Service Line Inventory



Laura Higgins

TEXAS COMMISION ON ENVIRONMENTAL QUALITY
WATER SUPPLY DIVISION

Outline



- Overview of the LCRR
- Service Line Inventory Walk-Through
- Next Steps What to do NOW

EPA's Intent to Strengthen LCR



- Goal: to proactively remove lead service lines, empower communities, and equitably protect public health.
- EPA announced two-prong approach:
 - LCRR effective now
 - LCRI (Lead and Copper Rule Improvements) under development

LCRR Timeline



- LCR originally published in 1991
- LCRR effective date: Dec 16, 2021
- LCRR compliance date: Oct 16, 2024
- LCRI published prior to Oct 16, 2024

LCRR Key Changes



- Service Line Inventory
- Lead Service Line Replacement
- Tiering Structure
- Sampling Changes
- Trigger Level
- Public Notice and Education
- Find and Fix
- Schools and Childcare Facility Testing

Important Definitions



- Lead service line Portion of pipe that is made of lead, which connects the water main to the building inlet.
- Galvanized requiring replacement Galvanized service line that is or was ever downstream of a lead service line or is currently downstream of lead status unknown.

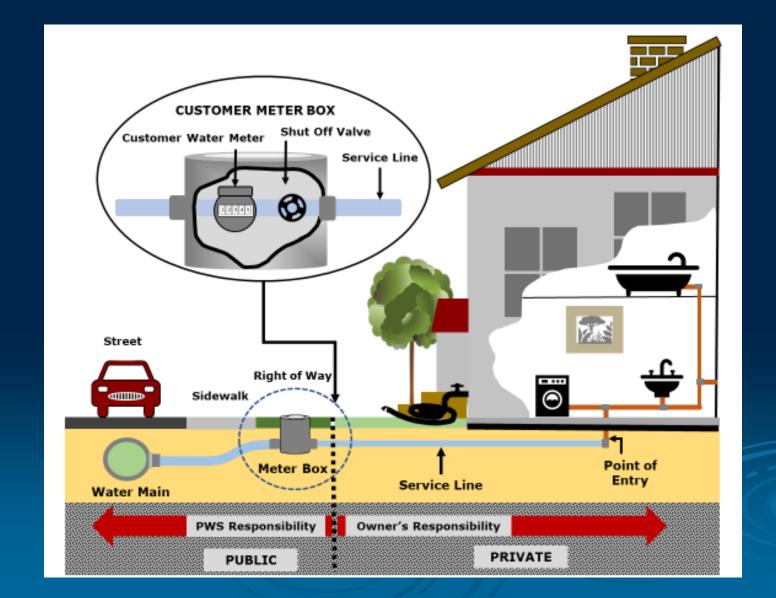
Important Definitions Continued



- Gooseneck, pigtail or connector Short section of piping used for connections between rigid service piping.
- Lead status unknown service line Service line that has not been demonstrated to meet or not meet the definition of lead free.

PWS Service Line Graphic





LCRR Service Line Inventory



- 40 CFR §141.84 All PWS must identify material of service lines connected to distribution system. Service lines must be categorized in the following manner:
 - Lead
 - Galvanized Requiring Replacement
 - Lead Status Unknown
 - Non-Lead

Service Line Inventory Form 20943



- WHO: Required for all community and non-transient, non-community water systems
- WHEN: Submitted to TCEQ by

October 16, 2024

• Submit updated inventory annually or triennially (in coordination with the water system's sampling schedule)

DON'T WAIT!







Service Line Inventory TCEQ Form 20943



TCEQ Inventory Template Includes:

- Introduction
- Template
 Instructions
- Classifying Service Lines (SLs)

- PWS Information
- Inventory Methods
- Inventory Summary
- Detailed Inventory
- Public Accessibility
- Certification

Background and Introduction





Service Line Inventory Form for Public Water Systems

What is the purpose of this template?

This template is required for community and non-transient non-community public water systems to comply with the service line inventory requirements of the January 15, 2021, Lead and Copper Rule Revisions (LCRR). This template provides fillable forms and tables for public water systems (systems) to document their methods, organize their inventory, submit the initial inventory and inventory updates electronically to the TCEQ, and document how they are making the inventory publicly available. Refer to the Lead and Copper Rule Revisions rule language in 40 CFR § 141 Subpart I and the EPA's Guidance for Developing and Maintaining a Service Line Inventory for minimum LCRR requirements and recommendations.

For questions, please contact LCRR@tceq.texas.gov or call (512) 239-4691. The financial, managerial, and technical (FMT) assistance program can provide additional assistance and can be reached (512) 239-4691 or FMT@tceq.texas.gov.

Submit the completed lead service line inventory electronically. For file sizes larger than 25 megabytes (MB), the TCEQ File Transfer Protocol Secure (FTPS) site is available at https://ftps.tceq.texas.gov/index.php.

How is the template organized?



Required Worksheets



PWS Information									
Purpose of this worksheet: For water systems to document basic system information. All information on this page is required.									
Facility Information [*]									
Water System Name:									
PWSID:	Population Servi people):	ed (number of	Number of Service Co	nnections: PWS T	ype:				
				cws					
If a CWS, do multi-family re	esidences comprise at lea	ast 20% of the stru	uctures you serve?	Yes					
System Contact Person [*]									
Name:			Title:						
FirstName Last Name									
Telephone:			Email:						
Person Who Prepared Inve	ntory (if different from a	above)*							
Name:			Title/Affiliation:						
Classifying SLs	WS Information Inve	ntory Methods	Inventory Summary	Detailed Inventory	Public Accessibility	Ce			

Inventory Methods



Inventory Methodology
PWS Name:
PWSID:

Purpose of this worksheet: For systems to document the methods and resources they used to develop and update the inventory.

Note: Cells that have a superscript * are required fields.

PWSID:

Part 1: Historical Records Review		
Type of Record	Describe the Records Reviewed for Your Inventory*	Indicate if record was reviewed as required by 40 § CFR 141.84(a)(3).*
Previous Materials Evaluation Example: Locations of Tier 1 lead tap sampling locations that are served by a lead service line.		Select "Yes" or "No"
Construction Records and Plumbing Codes Examples: Local ordinance adopting an international plumbing code. Permits for replacing lead service lines.		Select "Yes" or "No"
Water System Records Examples: Capital improvement plans. Standard operating procedures. Engineering standards.		Select "Yes" or "No"
4. Distribution System Inspections and Records Examples: Distribution system maps. Tap cards. Service line repair/replacement records. Inspection records. Meter installation records.		Select "Yes" or "No"
5. Other Records		Select "Yes" or "No"



Things to Keep in Mind



- Get creative with records!
 - Tax codes, appraisals
- Affidavit of senior personnel
- Maintenance and plumbing records
- Service lines installed after July 1, 1988 are likely non-lead

Inventory Methods Continued



Part 2: Ident	ifying Serv	ice Line Mater	ial During Norm	al Operations
---------------	-------------	----------------	-----------------	---------------

1. During which normal operating activities are you collecting information on service line material? Check all that apply. Note that under 40 § CFR 141.84(a)(5) water systems must identify and track service line materials in the inventory as they are encountered in the course of its normal operations.

Water meter reading	Select "Yes" or "No"	Water main repair or replacement	Select "Yes" or "No"	
Water meter repair or replacement	Select "Yes" or "No"	Water main repair or replacement	Select "Yes" or "No"	
Service line repair or replacement	Select "Yes" or "No"	Backflow prevention device inspection	Select "Yes" or "No"	-
Other	Select "Yes" or "No"		T	

If "Other", please explain below:

Did you develop or revise standard operating procedures to collect service line material information during normal operation? If "Yes", please explain below.

Select "Yes" or "No"

Part 3: Service Line Investigations

1. Identify the service line investigation methods your system used to prepare the inventory (check all that apply). If a water system chooses an investigation method not specified by the state under 40 CFR §141.84(a)(3)(iv), state approval is required. Note that investigations are not required by the LCRR but can be used by systems to assess accuracy of historical records and gather information when service line material is unknown.

Visual inspection at the Meter Pit	Select "Yes" or "No"	Water Quality Sampling - Sequential	Select "Yes" or "No"
Customer Self-Identification	Select "Yes" or "No"	Water Quality Sampling - Other	Select "Yes" or "No"
CCTV Inspection at Curb Box - External	Select "Yes" or "No"	Mechanical Excavation	Select "Yes" or "No"
CCTV Inspection at Curb Box - Internal	Select "Yes" or "No"	Vacuum Excavation	Select "Yes" or "No"
Water Quality Sampling - Targeted	Select "Yes" or "No"	Predictive Modeling	Select "Yes" or "No"
Water Quality Sampling - Flushed	Select "Yes" or "No"	Other	Select "Yes" or "No"
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If "Other", please explain below:

2. If "Predictive Modeling", please briefly describe the model and inputs used:



Inventory Summary



nventory Summary		
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		y Julilliai y

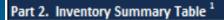
PWS Name:

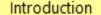
PWSID:

Purpose of this worksheet: For water systems to provide a summary of the service line inventory, including information on ownership, inventory format, and the number of service lines for each of the four required materials classifications.

Note: Cells that have a superscript * are required fields.

Part 1. General Information	
1. Is this the Initial Inventory or an Inventory Update?*	Select One
2a. Who owns the service lines in your system? If other, please explain below. *	Select Ownership Type
2b. Is there documentation that defines service line ownership in your system, such as a local ordinance? If	Select "Yes" or "No"
yes, please describe below and explain where ownership is split (e.g., property line, curb stop).	
3a. Describe when lead service lines were generally installed in your system below.	
3b. When were lead service lines banned for the system? Reference the state or local ordinance that banned the	use of lead in your system.
4. Are there lead goosenecks, pigtails or connectors in the system?	Select "Yes" or "No" or "Don't Know"





Inventory Summary Continued



Part 2. Inventory Summary Table 1

When using the Detailed Inventory worksheet, the classifications in the Column "Entire Service Line Material Classification" (Column Q) will be used to calculate the total number of service lines for each of the four material classifications below. Remember this is the classification for the entire service line.

Service Line Material Classification	Definition	Total Number of Service Lines (REQUIRED to be reported under the LCRR) ^x
Lead	Any portion of the service line is known to be made of lead. ²	4
Galvanized Requiring Replacement (GRR)	The service line is not made of lead, but a portion is galvanized and the system is unable to demonstrate that the galvanized line was never downstream of a lead service line.	2
Non-Lead	All portions of the service line are known NOT to be lead or GRR through an evidence-based record, method, or technique.	3
Lead Status Unknown	The service line material is not known to be lead or GRR. For the entire service line or a portion of it (in cases of split ownership), there is not enough evidence to support material classification.	0
	TOTAL	9

TCEQ-20943 (Rev. 12/16/2022)



¹This summary table is for reporting material for the entire service line connecting the water main to the customer's plumbing. See the Classifying SLs worksheet for additional guidance on assigning a materials classification to the entire service line when ownership is split. Remember that systems must track the system-owned and customer-owned portions separately in their inventory.

² A lead-lined galvanized service line is consistent with the definition of an LSL under the LCRR (*a portion of pipe that is made of lead, which connects the water main to the building inlet*) (40 CFR \$141.2) and must therefore be classified in the inventory as an LSL. Do not, however, count non-lead service lines with a lead gooseneck or pigtail as lead service lines.

Detailed Inventory



Dotail	~~	Inventory
Detail	œo	mvemorv

PWS Name: PWSID:

Purpose of this worksheet: To provide a format water systems can use to track materials for each service line in the distribution system.

General Instructions: Each row in this worksheet represents one service line connecting the water main to the customer's plumbing. The worksheet includes required and recommended elements; the columns with the aqua shading are required by the LCRR. The worksheet includes examples in rows 12 - 20 and is formatted for approximately 10,000 entries.

Note: Cells that have a superscript * are required fields; Cells that have a superscript * are conditionally required fields and can impact formulas throughout document.

TCEQ-20943 (Rev. 1/2/2022)

Location Information								System-Owned P	ortion		
		Location Identifier ^x									
Unique Se Line II		itreet Number ^x	Street Name ^x	City ^x	Zip Code ^x	Other Location Identifier [‡]	GPS Coordinate Latitude (decimal degree	Longitude	System-Owned Portion Service Line Material Classification ^x	If Non-Lead in Column J, Was Material Ever Previously Lead? [‡]	Service Line Installation Date [‡]
A Unique recommer for eac service li	nded ih			Dropdown list includes recommended subclassificatio If "Non-Lead Other", describe Notes field	101 00101111111111111111111111111111111	Diopdown list when the service line was installed or replaced					
Example	e 1	1234	Test St.	City	Zip Code	Intersection of Test and Elm St.	30.2711286	-97.7436995	Lead	Yes	Before 1989
Example	e 2	4321	Test St.	City	Zip Code	Intersection of Test and Main St.			Non-Lead	Yes	Between 1989 and 2014
. 1		1 0 1			ol iii oi	DIVID (D . 11	0.15
•	Intro	duction	Template Inst	ructions	Classifying SLs	PWS Inform	nation Inve	ntory Methods	Inventory Summary	Detailed Inventory	Public 🕀

Public Accessibility



Public Accessibility Documentation

PWS Name:

PWSID:

Purpose of this worksheet: For systems to provide documentation to states on how public accessibility requirements of the LCRR were met. All information on this page is required.

Remember that the LCRR requires systems to use a location identifier for service lines that are lead and galvanized requiring replacement. Water systems may, but are not required to, include a locational identifier for lead status unknown service lines or list the exact address of each service line (40 CFR §141.84(a)(8)(i))).

1. Select the location identifiers that you use for your service line inventory. Check all that apply.*

Address	Select "Yes" or "No"	GPS Coordinates	Select "Yes" or "No"
Street	Select "Yes" or "No"	Other	Select "Yes" or "No"

If "Other" is Yes, please describe below:

2. Does every service line have a location identifier? If "No", explain below. *

Select "Yes" or "No"

3. How is the inventory made publicly accessible? Check all that apply. Remember that if your system serves > 50,000 people, you must provide the inventory online. *

Interactive online map	Select "Yes" or "No"	Printed tabular data	Select "Yes" or "No"
Static online map	Select "Yes" or "No" Information on water utility mailings or newsletter		Select "Yes" or "No"
Online spreadsheet	Select "Yes" or "No"	Hard copy information available in water system	Select "Yes" or "No"
Printed service line map	Select "Yes" or "No"	Other	Select "Yes" or "No"



Certification

PWS Certification					
PWS Name: PWSID:					
Certify completion of your lead service line inventory by checking the appropriate boxes below, entering your water system information, and signing the certification. All information on this page is required.					
Select acknowledgment	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.				
Select acknowledgment	As the PWS Representative, I understand that if any additional service lines are subsequently identified as Lead, Galvanized Requiring Replacement, or Lead Status Unknown, the PWS is required to notify the State within 30 days of identifying the service line(s) and must prepare an updated inventory using Lead Service Line				
Select acknowledgment	As the PWS Representative, I understand that the PWS should maintain for review any resource, information, or identification method used for the development of this initial inventory. These records do not need to be submitted to TCEQ but should be available for review.				
Select acknowledgment	As the PWS representative, I understand that customers with a lead, galvanized requiring replacement, or lead status unknown service lines should be informed within 30 days of completion of initial LSLI and annually thereafter until the service line is				
Select acknowledgment	As the PWS representative, I understand that the PWS should provide an updated LSLI in accordance with its tap sampling monitoring period schedule, but no more frequently than annually. The updated LSLI must be submitted within 30 days of the end of each tap sampling period.				
[Enter Name Here]	The individual providing certification and acknowledgment to the above statements.				



Next Steps



- Water systems must comply with previous LCR (as codified in the July 1, 2020 CFR) until the LCRR Compliance Date: October 16, 2024
 - LSL Inventories are due by this date
- EPA is developing the LCRI
 - Intends to promulgate prior to October 16, 2024

Timeline





Final LCRR Published Spring – Fall 2021

EPA executive order review of LCRR and extensive public engagement

16 Dec. 2021

> EPA announces no changes to LCRR and new LCRI

Fall 2023

EPA is expected to provide more information on LCRI

16 Oct. 2024

Compliance date of LCRR

Presidential Executive Order 13990 to review rules (including LCRR)

20 Jan. 2021 Final LCRR republished without changes with effective date of December 16, 2021

16 June 2021 EPA published its Guidance for Developing and Maintaining a Service Line Inventory

4 Aug. 2022

Publication of LCRI

Summer 2024

What to work on NOW



- Comply with the current LCR
- Read the LCRR and EPA guidance
- Historical record review
- Inventory development
- Proactive replacement
- Corrosion control

Additional Resources



For more information, please see the links below:

- EPA website:
 - www.epa.gov/ground-water-and-drinking-water/review-national-primary-drinking-water-regulation-lead-and-copper
- Next Steps for the Lead and Copper Rule:
 - www.epa.gov/system/files/documents/2021-12/lcrr-review-fact-sheet_0.pdf
- EPA Press Release:
 - · www.epa.gov/newsreleases/epa-announces-intent-strengthen-lead-and-copper-regulations-support-proactive-lead
- EPA Funding Resources:
 - www.epa.gov/ground-water-and-drinking-water/funding-lead-service-line-replacement
- EPA Guidance for Developing and Maintaining a Service Line Inventory:
 - www.epa.gov/system/files/documents/2022-08/Inventory%20Guidance_August%202022_508%20compliant.pdf

Contact Us



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Lead and Copper Rule Program

- PWSLCR@tceq.texas.gov
- LCRR@tceq.texas.gov

Questions?



Speaker Introduction

Stacy Walters

- Regulatory Environmental Administrator
- ► City of Fort Worth



STRATEGIES TO COMPLIANCE

for the LCRR

Timeline

DEC. 16, 2021 EFFECTIVE DATE OCT. 16, 2024 COMPLIANCE DATE

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

2025
COMPLIANCE
MONITORING
BEGINS

Submit to the State:

- Tier 1 compliance testing
- Childcare testing
- School testing

EPA Develops LCRI

FORT WORTH'S INVENTORY

288,030 service connections

10	>30,000	0	55
Lead service lines	Galvanized requiring replacement (GRR)	Unknowns	Other

Develop Replacement Plan

Records Review

- County Appraisal District
- Ordinance review
- Inspection records
- Customer Service Inspections
- Historical records
- Capital improvement plans
- Customer service agreements



Plans Review

- Full LSL replacement procedure
- Strategy for informing customers before replacing
- Replacement goal
- Flushing procedure
- Testing
- Prioritization
- Funding

Compliance Monitoring



New 10 ppb trigger level (90th percentile calculation)





Determine Tier Levels (Tiers 1, 2, 3, 4, & 5)



5th Liter Sampling





Find and Fix (≥15 ppb)



Sampling at homes



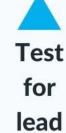














LCRI may modify some of these requirements

Schools & Daycares



EPA's 3Ts



250 mL sample containers



Water unused for 8 to 18 hours



Schools - Minimum 5 samples

(2 fountains, 1 kitchen faucet, 1 nurses office, 1 classroom or other used for drinking



Daycares - Minimum 2 samples

(1 fountain, 1 kitchen or classroom or other used for drinking)

3Ts Toolkit

The 3Ts toolkit includes modules to assist facilities in developing a drinking water testing program.



Module 1
Communicating the 3Ts



Module 2 Learning About Lead in Drinking Water



Module 3

Planning Your 3Ts Program



Module 4

Developing a Sampling Plan



Module 5

Conducting Sampling & Interpreting Results



Module 6

Remediation & Establishing Routine Practices



Module 7

Recordkeeping

The 3Ts Establishing a Lead Testing Program Checklist includes steps needed to take a holistic approach, including important areas of communication throughout.

For this and the full toolkit, visit: https://www.epa.gov/safewater/3Ts

Collaborate

Within Utility

Meter Services

Field Operations

Customer Service

Public Engagement

Capital Delivery

Water IT

Laboratory

Other City Departments

Code Compliance Consumer Health

Neighborhood Services

Development

Transportation/
Public Works

State Agencies

TCEQ

TEA

TDSHS

Local

County Health Departments

Schools (ISDs, parochial, private, charter)

Licensed child care

Other

Plumbers

Realtors

Social Service Organizations

Builders and Developers

Equity Issues

Resources



Money



Communications



Laboratory



Operations

Path Forward

Develop plans

- LSR Replacements
- Compliance Monitoring
- School/daycare testing
- Communication

Collaborate

- Internal stakeholders
- Outside entities
- Regulators
- Inventory

Complete

- Replacement Plan
- Public website

Recordkeeping

- Annual updates
- Decline to participate
- Test results
- Pitcher filter distribution



- Agency
- Customer
- Requirements











To do list (by Oct 16, 2024

- 1. Develop a SL inventory
- 2. Eliminate "unknown" SL
- 3. Prepare website for displaying
- 4. Develop a LSL Replacement Plan (including Find & Fix protocols)
- 5. Develop an SOP for disturbances of lead, unknown and galvanized downstream of lead
- 6. Prepare sampling plan for schools and registered daycares
- 7. Update sampling pool in accordance with new tiers
- 8. Revise sampling protocols to meet new requirements
- 9. Contract with a lab, if no in-house capability
- 10. Develop public education materials /notifications



Thank you

Stacy Walters
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Questions?

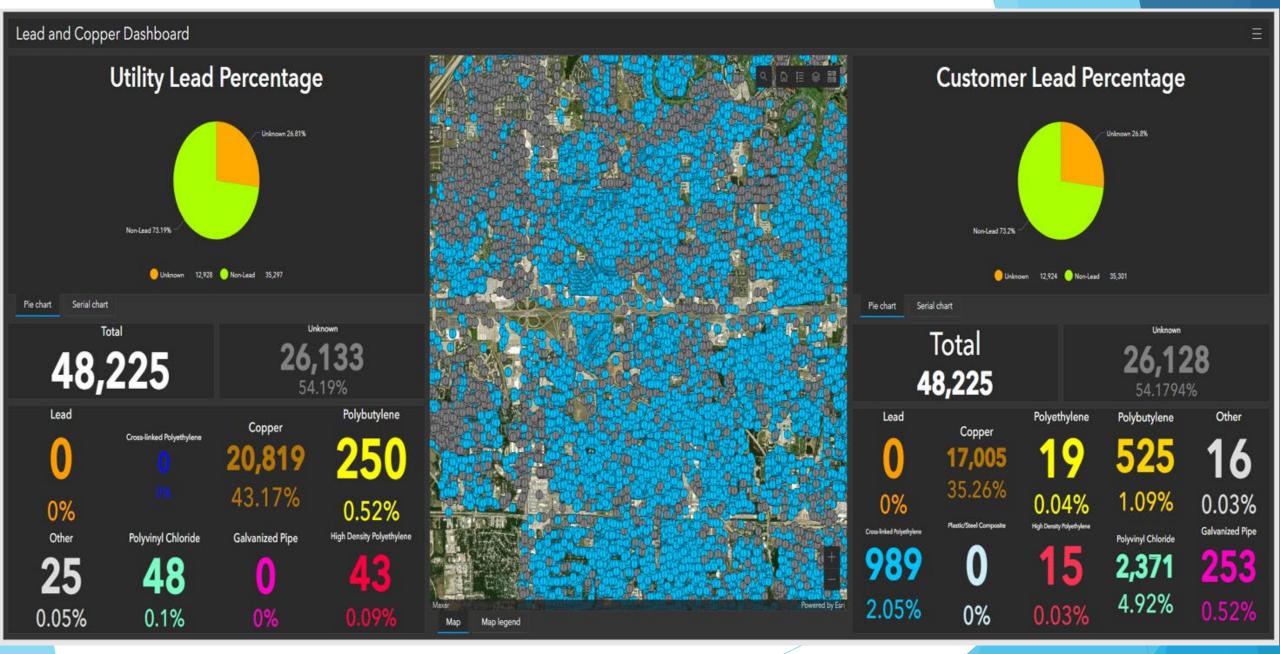


Speaker Introduction

Robert Archer

- ► Environmental Compliance Manager
- ► City of Irving

City of Irving Lead and Copper Dashboard



Questions?



Speaker Introduction

Mary Gugliuzza

- Media Relations and Communications Coordinator
- ► City of Fort Worth

COMMUNICATION CHALLENGES

for the LCRR

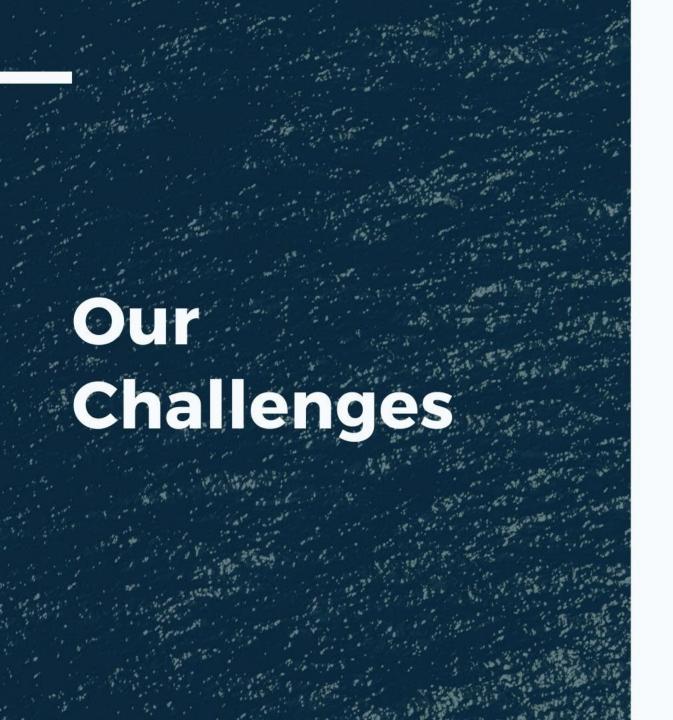
3 rules

- Lead and Copper Rule
 40 CFR part 141 Subpart I
- Consumer Confidence Report Rule
 40 CFR part 141 Subpart 0
- Public Notification Rule
 40 CFR PART 141 SUBPART Q

Public Outreach

- Inventory
- Compliance Sampling
- Public Notification
- LSL Replacements

- Corrosion Control
- School & Daycare Sampling
- Disturbances
- Health Departments
- Annual Water Quality Report (CCR)



 Developing all the notifications/outreach materials

 Developing and maintaining various stakeholder lists

 Communicating with schools and daycares

Communicating internally

By the numbers

8

14

11

??

Annually
(without trigger or action level exceedances)

Printed materials (by Oct. 16, 2024) Outreach
Requirements
for AL Exceedance

Time & effort to implement

Resources: Rule



Lead and Copper Rule Revisions www.epa.gov/ground-water-and-drinking-water/revised-lead-and-copper-rule



Lead and Copper Rule www.epa.gov/dwreginfo/lead-and-copper-rule



Electronic Code of Federal Regulations www.ecfr.gov/current/title-40/chapter-l/subchapter-D/part-141/subpart-l



TCEQ Lead & Copper Rule Revisions www.tceq.texas.gov/drinkingwater/chemicals/lcrr



TCEQ Drinking Water Advisory Work Group www.tceq.texas.gov/drinkingwater/dwawg



www.awwa.org/Resources-Tools/Resource-Topics/Contaminants-of-Concern/Lead/Lead-Communications



Mary Gugliuzza
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Thank you

Questions?



Wrap-Up

- If you submitted a RSVP for this webinar, you will receive an email with the presentation slides and a subsequent email with a link to the recording.
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North Central Texas Council of Governments

Thank you for attending!

NCTCOG Webinar May 22, 2023

Elena Berg, NCTCOG eberg@nctcog.org

Prepared in cooperation with the Texas Commission on Environmental Quality and U.S. Environmental Protection Agency





