

The background of the slide is a light blue gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered on the slide.

# **LEAD SERVICE LINE INVENTORY DEVELOPMENT**

MISSISSIPPI STATE DEPARTMENT OF HEALTH

BUREAU OF PUBLIC WATER SUPPLY

# WHY ARE WE DOING THIS

- TIMELINE OF LCRR

- JANUARY 15, 2021 – LCRR PROMULGATED
- DECEMBER 16, 2021 – LCRR EFFECTIVE DATE
- OCTOBER 16, 2014 – LEAD SERVICE LINE INVENTORY (LSL INVENTORY) DUE DATE
  - REALLY JUST A SERVICE LINE INVENTORY
- THE LCRR REQUIRES ALL COMMUNITY WATER SUPPLIES (CWS) AND NON-TRANSIENT NON-COMMUNITY WATER SUPPLIES (NTNC) TO DEVELOP A LEAD SERVICE LINE INVENTORY (LSL INVENTORY) BY OCTOBER 16, 2024 AND SUBMIT IT TO MSDH'S BUREAU OF PUBLIC WATER SUPPLY

# LCRR & LSLI UPDATE

- WHY IS LSL INVENTORY NEEDED
  - ASSESS THE EXTENT OF THE LSLs WITHIN YOUR SYSTEM
  - IDENTIFY BETTER SAMPLING LOCATIONS
  - BEGIN PLANNING FOR LSL REPLACEMENTS, INCLUDING STATE AND FEDERAL GRANTS AND LOANS (I.E. BIPARTISAN INFRASTRUCTURE LAW (BIL) PROVIDES \$15 BILLION FOR LEAD SERVICE LINE REPLACEMENTS)
  - IS REQUIRED

## WHAT WILL YOU NEED TO SHOW?

- ALL SERVICE LINES CONNECTED TO YOUR PUBLIC WATER SUPPLY DISTRIBUTION SYSTEM REGARDLESS OF OWNERSHIP STATUS (E.G., WHERE SERVICE LINE OWNERSHIP IS SHARED, THE INVENTORY WOULD INCLUDE BOTH THE PORTION OF THE SERVICE LINE OWNED BY THE WATER SYSTEM AND THE CUSTOMER-OWNED PORTION OF THE SERVICE LINE)
- AT A MINIMUM, IT IS EXPECTED THAT SERVICE LINES WILL NEED TO BE CLASSIFIED AS LEAD, GALVANIZED REQUIRING REPLACEMENT, NON-LEAD, AND UNKNOWN.
- THE INVENTORY MUST BE MADE AVAILABLE FOR PUBLIC REVIEW. SYSTEMS WITH A POPULATION OVER 50,000 SERVED SHALL MAKE THEIR INVENTORY ACCESSIBLE ONLINE

# OUR HOPE AND GOALS

- YOUR INVENTORY WILL BE AS ACCURATE IS POSSIBLE
- IT WILL BE REFLECTIVE OF YOUR ENTIRE SYSTEM
- IT CAN BE USED TO CREATE A REVISED SAMPLE SITE PLAN
- TO MAKE AS SIMPLE AS POSSIBLE WHILE STILL GATHERING THE NECESSARY INFORMATION
- YOU WILL BE ABLE TO MAKE REASONABLE ASSUMPTIONS ABOUT YOUR SYSTEM

# INVENTORY REQUIREMENTS

- MATERIALS CLASSIFICATION
  - EACH SERVICE LINE OR PORTION OF SERVICE LINE
  - LEAD, GALVANIZED NEEDING REPLACEMENT, NON-LEAD OR LEAD STATUS UNKNOWN
- ALL SERVICE LINES AND OWNERSHIP
  - INVENTORY INCLUDING SYSTEM AND CUSTOMER PORTIONS IN DISTRIBUTION
- SERVICE LINE CONSUMER NOTIFICATION
  - TIMING (WITHIN 30 DAYS OF DISCOVERY)
  - CONTENT (SERVICE LINE MATERIAL MAKEUP)
  - DELIVERY (SEND TO STATE – VIA EMAIL)
  - REPORTING TO STATES (PROVIDE NOTIFICATION TO AFFECTED CUSTOMERS LIKE STANDARD PN)

# INVENTORY REQUIREMENTS

- INFORMATION TO IDENTIFY MATERIAL
  - PREVIOUS MATERIALS EVALUATION
  - CONSTRUCTION AND PLUMBING CODES/RECORDS
  - WATER SYSTEM RECORDS
  - DISTRIBUTION SYSTEM INSPECTIONS AND RECORDS
  - INFO FROM NORMAL DAY TO DAY OPERATIONS
  - STATE SPECIFIED INFO

# DEADLINES FOR SUBMISSION

- INITIAL INVENTORY
  - SUBMISSION BY OCTOBER 16, 2024
  - INITIAL INVENTORY OR DEMONSTRATE THE ABSENCE OF LSLs
- UPDATES TO THE INITIAL INVENTORY – ANNUALLY OR TRIENNIALLY BASE ON TAP SAMPLING
- PUBLIC ACCESSIBILITY AND CCR
  - MAKE PUBLICLY AVAILABLE AND INCLUDE LOCATIONAL IDENTIFIER
  - >50K MUST PROVIDE INVENTORIES ONLINE



# THE “GOT TO” VS “COULD DO”

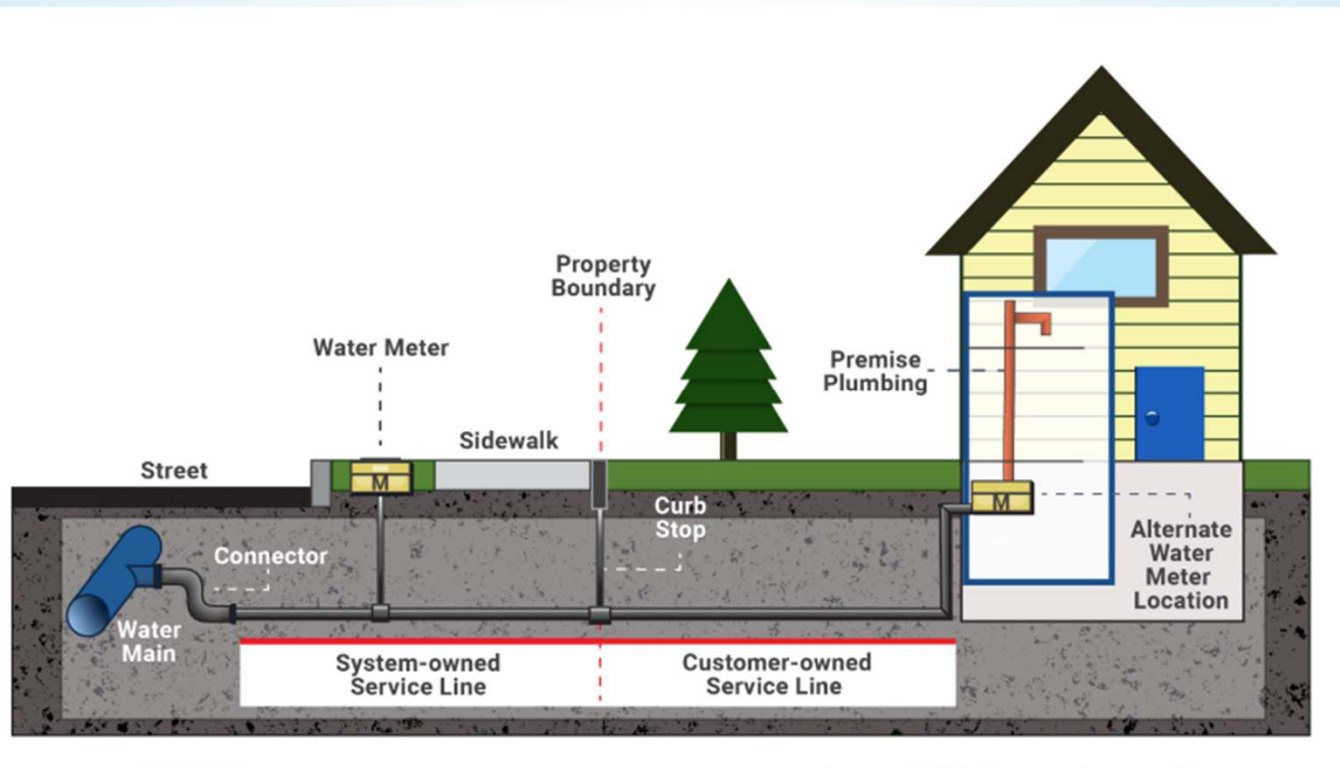
THE LCRR HAS LOTS OF “YOU GOT TO DO THIS AND THAT...”

BUT IT ALSO HAS SOME LATITUDE ON THE INVENTORY NEEDS

# REQUIRED ELEMENTS OF THE INVENTORY

- REQUIRED SERVICE LINE INVENTORY MATERIALS CLASSIFICATIONS
  - LEAD
    - LEAD GOOSENECKS, PIGTAILS, OR CONNECTOR ARE NOT CONSIDERED LSL)
  - GALVANIZED REQUIRING REPLACEMENT (IN CONJUNCTION WITH LSL DOWNSTREAM)
    - EXAMPLE – CUSTOMER PORTION IS GALV AND PWS PORTION IS LEAD
    - SIMILARLY, GALV DOWNSTREAM FROM GOOSENECKS, PIGTAILS, OR CONNECTORS NO NOT COUNT)
  - NON-LEAD (EVIDENCE BASED RECORD, METHOD, OR TECHNIQUE)
  - LEAD STATUS UNKNOWN

# SERVICE LINE OWNERSHIP DISTINCTION WATER SYSTEM AND CUSTOMER



**Exhibit 2-3: Classifying Service Line Materials When Ownership is Split According to the LCRR 40 CFR §141.84(a)(4)**

<b>System-Owned Portion</b>	<b>Customer-Owned Portion</b>	<b>Classification for Entire Service Line</b>
Lead	Lead	Lead
Lead	Galvanized Requiring Replacement	Lead
Lead	Non-lead	Lead
Lead	Lead Status Unknown	Lead
Non-lead	Lead	Lead
Non-lead and never previously lead	Non-lead, specifically galvanized pipe material	Non-lead
Non-lead	Non-lead, material other than galvanized	Non-lead
Non-lead	Lead Status Unknown	Lead Status Unknown
Non-lead, but system is unable to demonstrate it was not previously Lead	Galvanized Requiring Replacement	Galvanized Requiring Replacement
Lead Status Unknown	Lead	Lead
Lead Status Unknown	Galvanized Requiring Replacement	Galvanized Requiring Replacement
Lead Status Unknown	Non-lead	Lead Status Unknown
Lead Status Unknown	Lead Status Unknown	Lead Status Unknown

# INVENTORY RECOMMENDATIONS “COULD DO”

- LEAD STATUS UNKNOWN “LSL LIKELIHOOD”
- DETAIL CLASSIFICATION OF GALVANIZED SL (KNOWN, PREVIOUSLY, OR NEVER DOWNSTREAM)
- LEAD-LINED GALVANIZED PIPES
- ACTUAL MATERIAL IDENTIFICATION FOR NON-LEAD
- OTHER DRINKING WATER INFRASTRUCTURE
  - CONSIDER TRACKING LEAD GOOSENECKS, PIGTAILS, AND CONNECTORS
  - LEAD SOLDER IN PREMISE PLUMBING – MAY PROVE USEFUL LATER
  - FITTING AND EQUIPMENT CONNECTED TO THE SERVICE LINE – MAY BE OLDER AND REFLECTIVE OF PRE REDUCTION OF LEAD IN DW ACT.

# LCRR REQUIREMENTS “GOT TO”

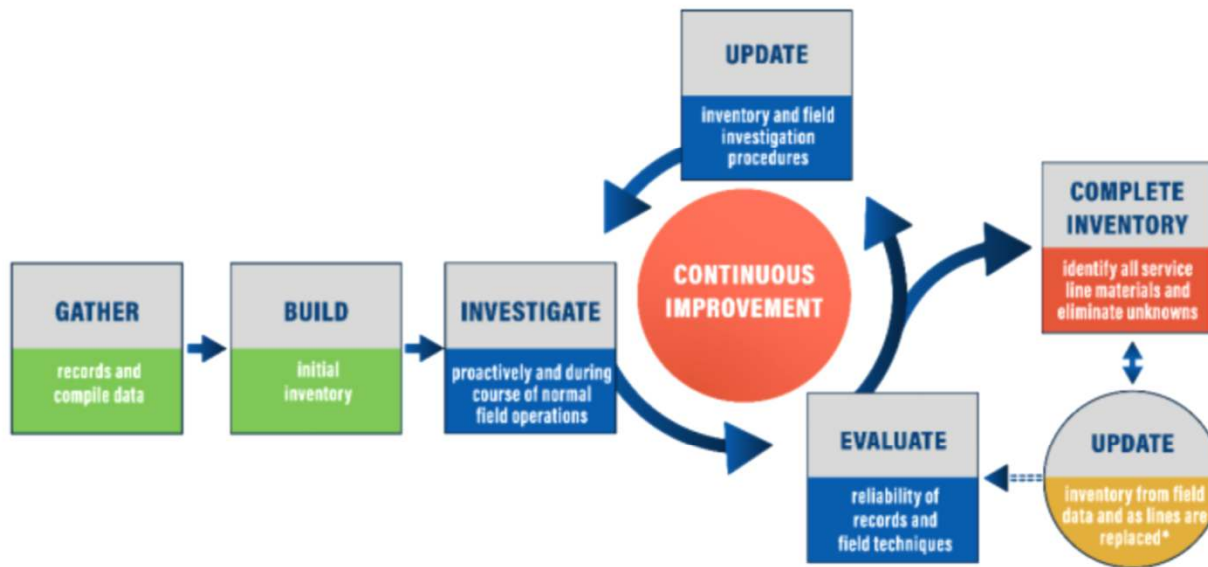
## GOT TO...

- INCLUDE ALL SERVICE LINES REGARDLESS OF OWNERSHIP STATUS AND INTENDED USE
- LOCATION IDENTIFIERS
  - MUST BE PUBLICLY AVAILABLE
  - DOESN'T HAVE TO INCLUDE EXACT STREET ADDRESSES
  - IDENTIFIER COULD BE ANY NUMBER OF UNIQUE DESCRIPTIONS

## COULD DO...

- INCLUDE A LOCATION IDENTIFIER FOR ALL SERVICE LINE MATERIALS
- CONSIDER PUBLISHING THE STREET ADDRESS
- PROVIDE ADDITIONAL LOCATIONAL DESCRIPTORS
- ADDITIONAL SERVICE LINE CHARACTERISTICS
  - SOURCE OF INFO FOR EACH LINE
  - PIPE DIAMETER
  - INSTALLATION OR REPLACEMENT DATE

# PLANNING YOUR INVENTORY



## Replace Lead Service Lines

Replacing lead service lines can occur anytime in the steps shown

\*Discrepancies may be occasionally encountered. If they are repeatedly encountered, systems should reassess their confidence in their inventory's accuracy.

# INVENTORY PLANNING “GOT TO”

- LIST, SPREADSHEET, OR DATABASE
- REGARDLESS
  - EACH SERVICE LINE MUST BE INCLUDED
  - WILL NEED TO COLLECT SPECIFIC DATA POINTS
  - DIFFERENTIATE SYSTEM OWNED PORTION VS. CUSTOMER OWNED PORTIONED
  - COULD INCLUDE ADDITIONAL INFO ON GOOSENECKS, PIGTAILS, & CONNECTORS
  - LABELING OF DATA SHOULD BE CONSISTENT
  - MAINTAINING INFO EVEN AFTER CHANGES OCCUR



# INVENTORY PLANNING

- TOOLS THAT COULD HELP...
  - MAPS COULD BE UTILIZED TO INFORM THE PUBLIC AND HELP STAFF – COULD BE SIMPLE OR INTERACTIVE.
  - DEVELOP INTERNAL PROCEDURES FOR COLLECTING SERVICE LINE INFORMATION
    - DONE WITH NORMAL OPERATIONS
    - VISUAL INSPECTIONS
    - PARTNERSHIP WITH THIRD PARTIES – BUILDING INSPECTORS, PLUMBERS, ETC.

# FIELD COLLECTION OF INFORMATION

- OPPORTUNITIES FOR COLLECTION – WORKING IT INTO THE DAY-TO-DAY
  - METER READING
  - METER REPAIR OR REPLACEMENT
  - SERVICE LINE REPAIR OR REPLACEMENT
  - WATER MAIN REPAIR OR REPLACEMENT
  - BACKFLOW PREVENTER INSPECTIONS
  - OTHER STREET/ROAD REPAIR OR CAPITAL IMPROVEMENT PROJECT

# INVENTORY PLANNING “COULD DO”

- CONSIDER A CONTINUOUS IMPROVEMENT APPROACH FOR INVENTORY
- “LIVING DATASET” THAT CAN BE CONTINUALLY IMPROVED OVER TIME WITH NEW AND BETTER INFORMATION INCLUDING WHEN LSLs ARE REPLACED.
- INTERVIEWS WITH EXPERIENCED INDIVIDUALS CAN HELP FOCUS THE INVENTORY EFFORT
- WATER SYSTEMS COULD CONSIDER INTERVIEWING NEIGHBORING WATER SYSTEMS ABOUT REGIONAL CONSTRUCTION PRACTICES.
- WATER SYSTEMS SHOULD CONSIDER DEVELOPING PROCESSES TO COLLECT SERVICE LINE INFORMATION DURING NORMAL OPERATIONS
- INVENTORY ACTIVITIES SHOULD BE CONSIDERED AS SOMETHING THAT CAN BE WORKED INTO THE DAY-TO-DAY ACTIVITIES
- IT IS ENCOURAGED TO PARTNER WITH PLUMBERS AND OTHER THIRD PARTIES TO OBTAIN INFORMATION ON SERVICE LINE MATERIALS

# HISTORICAL RECORDS REVIEW

- PREVIOUS MATERIALS EVALUATION ←
- CONSTRUCTION AND PLUMBING CODES AND RECORDS
- WATER SYSTEM RECORDS ←
  - DISTRIBUTION MAPS
  - RECORDS FOR SERVICE CONNECTIONS
  - METER INSTALLATION RECORDS
  - CAPITAL IMPROVEMENT RECORDS
  - SOP'S
- DISTRIBUTION SYSTEM INSPECTIONS AND RECORDS
- STATE REQUIREMENTS

# HISTORICAL RECORDS REVIEW

- PREVIOUS MATERIALS EVALUATION
  - PREVIOUSLY SYSTEMS WERE REQUIRED TO IDENTIFY IF CERTAIN CONSTRUCTION MATERIALS WERE PRESENT (EARLY LCR – THIS INFORMATION WILL MOST LIKELY BE LIMITED)
    - LEAD (PIPING, SOLDER, CAULKING, INTERIOR LINING OF DIST. MAINS, ALLOYS, AND HOME PLUMBING);
    - COPPER FROM PIPING AND ALLOYS, SERVICE LINES, AND HOME PLUMBING;
    - GALVANIZED PIPING, SERVICE LINES, AND HOME PLUMBING;
    - FERROUS PIPING MATERIALS SUCH AS CAST IRON AND STEEL; AND
    - ASBESTOS CEMENT PIPE.

# HISTORICAL RECORDS

- **GOT TO**

- REVIEW THE LCR PAST (LEAD AND GALVANIZED IRON OR STEEL) THAT IT HAS IDENTIFIED; UTILIZE ANY ADDITIONAL RESOURCES, INFO, OR OTHER ID METHODS

- **COULD DO**

- WATER SYSTEMS SHOULD DOCUMENT THE RECORDS THEY REVIEWED & INCLUDE THE SOURCE OF MATERIAL CLASSIFICATION IN THEIR INVENTORY.
- WATER SYSTEMS SHOULD CONTINUE TO GATHER INFORMATION ON SERVICE LINE MATERIALS TO ENSURE ACCURACY
- IF CERTAIN HISTORICAL RECORDS ARE UNRELIABLE, CONSIDER RECLASSIFYING SERVICE LINE MATERIALS UNTIL BETTER INFORMATION IS AVAILABLE
- COULD INCORPORATE PREVIOUS REVIEWS INTO THEIR INITIAL INVENTORY AND DOCUMENT THE DATE AND SCOPE OF THE REVIEWS.
- TAP CARDS – GOOD INFO – CONSIDER DIGITIZING TAP CARDS

# SERVICE LINE INVESTIGATION METHODS

- VISUAL INSPECTION OF SERVICE LINE MATERIAL
- VISUAL INSPECTION OF SERVICE LINE BY CUSTOMER
- WATER QUALITY SAMPLING
- EXCAVATION
- PREDICTIVE MODELING – PATTERNS IN DATA TO DEVELOP RULES THAT COULD PROVIDE PROBABILITIES OF LSL LOCATIONS

# VISUAL INSPECTION



- PLASTIC - SMOOTH PIPE OF VARIOUS COLORS (E.G., WHITE, BLUE, BLACK, AND GREEN).
- LEAD IS A SOFT METAL THAT IS A DULL, SILVER-GRAY COLOR. IT IS EASILY SCRATCHED WITH A COIN OR KEY, AND THE SCRATCHED AREAS WILL BE SHINY. IT IS NON-MAGNETIC, MEANING A MAGNET WILL NOT STICK TO IT. LEAD PIPE IS COMMONLY ATTACHED TO OTHER PIPE WITH A “WIPED” JOINT.
- COPPER IS THE COLOR OF A PENNY.
- GALVANIZED IS A DULL, SILVER-GRAY COLOR THAT IS DIFFICULT TO SCRATCH. IT IS MAGNETIC, MEANING A MAGNET WILL STICK TO IT.





## Follow these steps:

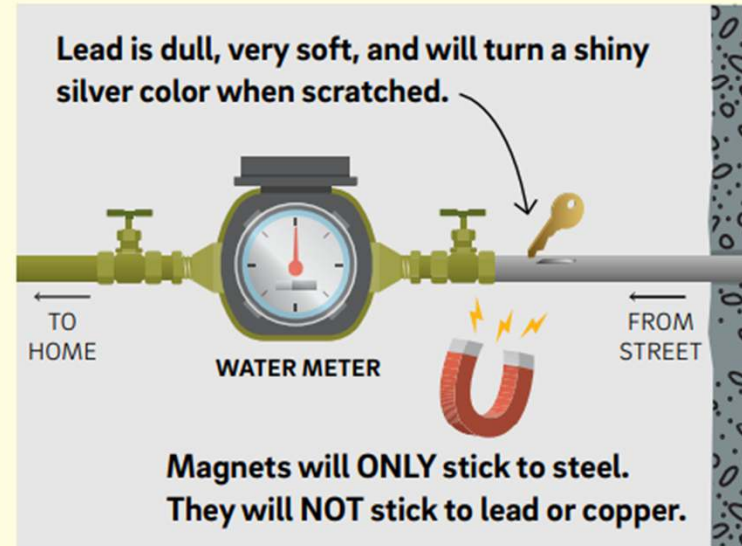
### You will need:

- Key or a coin
- Strong refrigerator magnet

- 1.** Find the water meter in your basement. Look at the pipe that comes through the outside wall of your home and connects to your meter.
- 2.** Carefully scratch the pipe (like you would a lottery ticket) with a key or a coin. Do not use a knife or other sharp tool. Take care not to make a hole in the pipe. If the scratch turns a shiny silver color, it could be lead or steel.  
**NOTE:** If pipe is painted, use sandpaper to expose the metal first.
- 3.** Place the magnet on the pipe. If a magnet sticks, it is a steel pipe.

### Other ways you can check for lead:

- **Purchase a lead test kit at a hardware or home improvement store.** These kits test what the pipe is made from—not the water inside. Look for an EPA recognized kit.
- **A licensed and insured plumber can inspect your pipes and other plumbing for lead or steel. Replacing an older brass faucet or valve might reduce the lead in water.**



# SERVICE LINE INVESTIGATION METHODS

- **WATER QUALITY SAMPLING**

- **TARGETED SERVICE LINE SAMPLING** INVOLVES FLUSHING OUT THE VOLUME OF WATER IN THE PREMISE PLUMBING AND COLLECTING AND ANALYZING A SAMPLE FROM THE SERVICE LINE. THE VOLUME OF WATER FROM THE TAP TO THE SERVICE LINE CAN BE ESTIMATED BASED ON PIPE DIAMETERS AND LENGTHS. FOUND THAT BASED ON TYPICAL PREMISE PLUMBING VOLUMES, A LEAD POSSIBLE CONCENTRATION OF 3 PPB IN THE SECOND LITER AFTER 15 MINUTES OF STAGNATION WAS INDICATIVE OF AN LSL.
- **FLUSHED SAMPLING** INVOLVES COLLECTING A SAMPLE FROM THE CUSTOMER'S TAP AFTER A SET FLUSHING TIME. FOR EXAMPLE, FLUSHING FOR 5 MINUTES COULD RESULT IN A SUFFICIENT DIFFERENCE IN LEAD LEVELS TO DISTINGUISH LSL SITES FROM NON-LSL SITES. THIS METHOD IS SIMPLE AND CAN BE DONE AS AN INITIAL SCREENING.
- **SEQUENTIAL SAMPLING** USES SERIES OF CONSECUTIVE SAMPLES (TYPICALLY 500 ML TO 1 L) COLLECTED FROM AN INTERIOR TAP AFTER A STAGNATION PERIOD (TYPICALLY 6 HOURS OR MORE). THE NUMBER OF SAMPLES NEEDED DEPENDS ON THE LENGTH AND DIAMETER OF THE PLUMBING FROM THE TAP THROUGH THE LENGTH OF THE PREMISE PLUMBING AND SERVICE LINE, BUT IT IS COMMONLY BETWEEN 8 AND 15 LITERS

# DEVELOPING THE INITIAL INVENTORY

- **GOT TO**

- THE INITIAL INVENTORY MUST INCLUDE ALL SERVICE LINES REGARDLESS OF OWNERSHIP
- THE INITIAL SERVICE LINE INVENTORY MUST USE HISTORICAL RECORDS AS DESCRIBED IN CHAPTER 4, INFORMATION GATHERED DURING NORMAL OPERATIONS AS DESCRIBED IN CHAPTER 3, AND ANY RESOURCE, INFORMATION, OR IDENTIFICATION METHOD UTILIZED
- NON-LEAD MUST BE DETERMINED NOT TO BE LEAD OR GALVANIZED REQUIRING REPLACEMENT (GRR) THROUGH AN EVIDENCE-BASED RECORD, METHOD, OR TECHNIQUE.
- IF THE WATER SYSTEM IS UNABLE TO DEMONSTRATE THAT THE GALVANIZED SERVICE LINE WAS NEVER DOWNSTREAM OF A LEAD SERVICE LINE (LSL), IT MUST PRESUME THERE WAS AN UPSTREAM LSL AND CLASSIFY IT AS GRR.

# DEVELOPING THE INITIAL INVENTORY

- **COULD DO**

- EPA RECOMMENDS THAT SYSTEMS CREATE AN INITIAL INVENTORY THAT IS AS THOROUGH AS POSSIBLE. DOING SO WOULD MINIMIZE THE NUMBER OF UNKNOWNNS AND BENEFIT WATER SYSTEMS AND CUSTOMERS BY:
- POTENTIALLY REDUCING THE NUMBER OF FIELD INVESTIGATIONS CONDUCTED BY WATER SYSTEMS TO IDENTIFY UNKNOWNNS.
- PROVIDING SERVICE LINE MATERIAL INFORMATION MORE QUICKLY TO CUSTOMERS, THEREBY ALLOWING THEM TO TAKE STEPS TO MINIMIZE THEIR LEAD EXPOSURE, INCLUDING REPLACING THEIR LSLs AND GRR.
- FACILITATING ACCESS TO THE CURRENT FUNDING AVAILABLE FOR LEAD SERVICE LINE REPLACEMENT (LSLR) ACTIVITIES, ALLOWING FOR SYSTEMS TO DEMONSTRATE THE NEED AND SCOPE OF LSL PROJECTS.

**Starting Dataset**

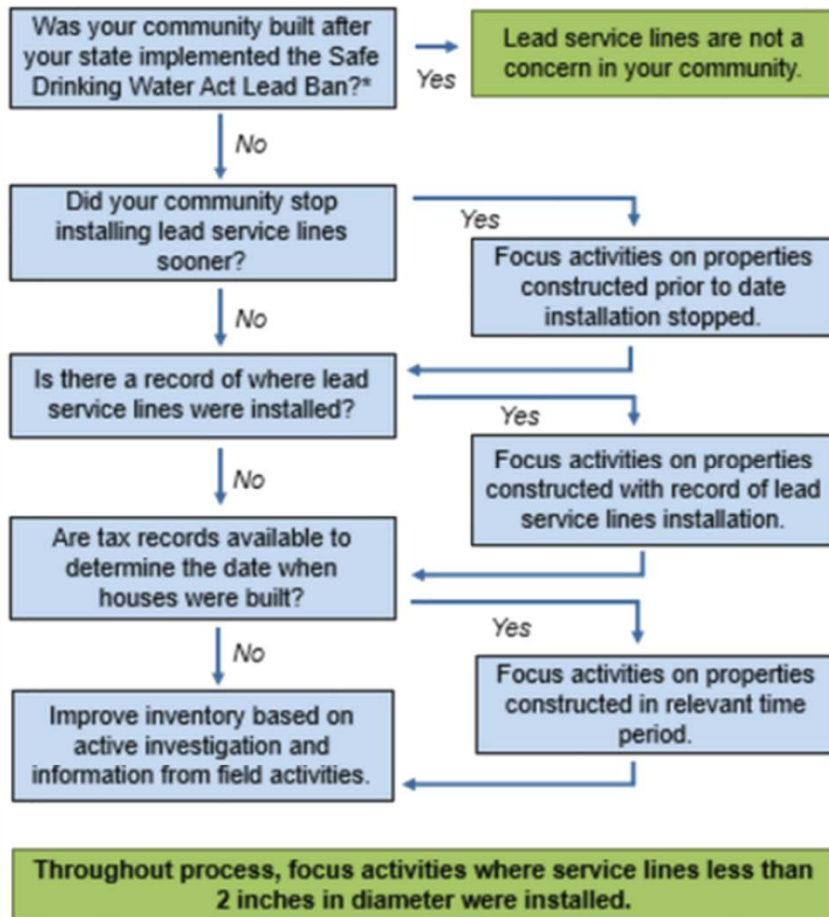
Local lead ban,  
building type, year  
premise built

Pipe  
Diameter

Data  
-set

# APPROACH 1: INITIAL SCREEN PROCESS

Exhibit 6-2: LSLR Collaborative Flow Chart



\*The federal Lead Ban was effective June 19, 1986, but individual states may not have implemented state-specific regulations for 1 – 2 years.

# APPROACH 2: ASKING KEY QUESTIONS

← State Lead Ban April/May of 1988

# DEVELOPING THE INITIAL INVENTORY

- **DEMONSTRATING A GALVANIZED LINE IS NON-LEAD (SOME EXAMPLES)**
  - AN ORIGINAL TAP CARD FROM INSTALLATION SHOWING THE MATERIAL IS NOT LEAD. ←
  - THE DATE LEAD WAS BANNED OR NOT USED. SL INSTALLED AFTER THAT DATE WOULD BE NON-LEAD. ←
  - CONSTRUCTION PRACTICES SHOWING UNIFORM PIPE MATERIAL WAS INSTALLED (*E.G.*, GALVANIZED STEEL WAS USED FOR THE ENTIRE SERVICE LINE).
  - ANY OTHER RECORD SHOWING LEAD WAS NOT USED AT A PARTICULAR SITE.
- **CONDUCTING SERVICE LINE INVESTIGATIONS (NOT REQUIRED, BUT COULD BE USEFUL)**

# DEVELOPING THE INITIAL INVENTORY

- PRIORITIZING FIELD INVESTIGATIONS
  - THE COMPLETENESS OF HISTORICAL RECORDS (*E.G.*, HOW MANY OF THE TOTAL SERVICE LINES ARE INCLUDED, AND HOW MUCH OF THE DISTRIBUTION SERVICE AREA IS COVERED)
  - CONFIDENCE IN THE ACCURACY OF HISTORICAL RECORDS (CROSS-CHECKING W/OTHER RECORDS & FIELD REVIEW)
  - THE EXTENT THE SYSTEM WILL ALREADY BE IN THE FIELD DOING WORK, SUCH AS METER REPLACEMENT AND LSLR
  - PREVIOUS SERVICE LINE INVESTIGATIONS & NUMBER OF UNKNOWNNS
- PRIORITIZATION IDEAS
  - CONSIDER VULNERABLE AND ENVIRONMENTAL JUSTICE POPULATIONS FIRST
  - TARGET AREA WITH HIGH LEVELS OF UNKNOWNNS
  - LOCATIONS WHERE THE LIKELIHOOD OF LSL IS HIGH
  - USE FIELD INVESTIGATIONS TO VERIFY HISTORICAL RECORDS



# REQUIREMENTS FOR SYSTEMS W/ ONLY NON-LEAD SERVICE LINES

- DEVELOP AN INITIAL INVENTORY THAT COMPLIES WITH THE REQUIREMENTS. SUBMIT THE INITIAL INVENTORY BY **OCTOBER 16, 2024**. REMEMBER THAT ALL SYSTEMS, EVEN THOSE WITH INITIAL INVENTORIES THAT IDENTIFY ALL SERVICE CONNECTIONS AS NON-LEAD SERVICE LINES, ARE REQUIRED TO CREATE AND SUBMIT THEIR INITIAL INVENTORY TO THE STATE
- SYSTEMS WHOSE INITIAL INVENTORY CONTAIN ONLY NON-LEAD SERVICE LINES MAY PROVIDE A WRITTEN STATEMENT THAT THE SYSTEM HAS NO LSLs OR GRRs AND A GENERAL DESCRIPTION OF METHODS USED TO MAKE THE DETERMINATION TO MEET INVENTORY PUBLIC ACCESSIBILITY REQUIREMENTS OF THE LCRR
- INCLUDE LANGUAGE IN THEIR ANNUAL CONSUMER CONFIDENCE REPORT (CCR) EXPLAINING HOW CUSTOMERS CAN ACCESS THE INVENTORY OR PROVIDE A STATEMENT WITH THE DESCRIPTION OF METHODS USED TO MAKE THE DETERMINATION. NOTE THAT THIS REQUIREMENT APPLIES TO CWS ONLY.
- NOTIFY THE STATE WITHIN 30 DAYS AND PREPARE AN UPDATED INVENTORY ON A SCHEDULE ESTABLISHED BY THE STATE IF THE SYSTEM SUBSEQUENTLY FINDS AN LSL OR GRR SERVICE LINE

Scenario	Basis of Determination <sup>1</sup>	Recommended Documentation <sup>2</sup>
Never had LSLs	Municipal codes and construction dates (e.g., all service lines were installed after lead was banned)	<ul style="list-style-type: none"> <li>• Relevant municipal code language and dates and references/web links to materials that are available online.</li> <li>• Dates when service lines were constructed, and a list of service line materials used instead of lead.</li> <li>• Confirmation that no LSLs have ever been found in the system.</li> </ul>
	Detailed historical records on service line material, location, and size indicating that all service lines are a material other than lead (e.g., copper or PVC)	<ul style="list-style-type: none"> <li>• Description of historical records including format of the records and condition.</li> <li>• Specific standard operating procedures (SOPs) or policies regarding LSL installation.</li> <li>• Description of how the system verified the accuracy of historical records including the method(s) and number of verified service lines records compared to the total.</li> <li>• Confirmation that no LSLs have ever been found in the system.</li> </ul>
	Field investigations	<ul style="list-style-type: none"> <li>• Description of methods including how the system inspected the material of the system-owned and customer-owned portion, if applicable.</li> <li>• The number of service lines that were investigated using each method.</li> <li>• Confirmation that no LSLs have ever been found in the system.</li> </ul>
Replaced all LSLs and GRR	Detailed historical records of non-lead lines and records showing when each LSL and GRR service line was replaced	<ul style="list-style-type: none"> <li>• Description of historical records documenting non-lead service line material along with description of how the system verified the accuracy of non-lead records.</li> <li>• Specific SOPs or policies regarding LSL installation.</li> <li>• Detailed list of where and when each LSL and GRR was replaced.</li> </ul>

## RECOMMENDED DOCUMENTATION FOR NON-LEAD SERVICE LINES

# NOTIFICATION OF KNOWN OR POTENTIAL SERVICE LINE CONTAINING LEAD

- WATER SYSTEMS WITH LSL, GRR, OR LEAD STATUS UNKNOWN SERVICES LINES MUST PROVIDE NOTIFICATION TO PEOPLE SERVED BY THESE LINES WITHIN 30 DAYS AFTER COMPLETING THE INITIAL INVENTORY. FOR NEW CUSTOMERS, THE NOTICE MUST BE PROVIDED AT THE TIME OF SERVICE INITIATION. THE NOTIFICATION MUST BE REPEATED ANNUALLY UNTIL THE ENTIRE SERVICE LINE IS NO LONGER A LEAD, GRR, OR LEAD STATUS UNKNOWN SERVICE LINE. DELIVERY MUST BY MAIL OR ANOTHER STATE APPROVED METHOD.
- ALL NOTIFICATIONS MUST INCLUDE THE FOLLOWING:
  - A STATEMENT THAT THE SERVICE LINE MATERIAL IS LEAD, GRR, OR LEAD STATUS UNKNOWN
  - INFORMATION ON THE HEALTH EFFECTS OF LEAD.
  - STEPS TO MINIMIZE EXPOSURE IN DRINKING WATER
- ADDITIONAL CONTENT IS REQUIRED BASED ON SERVICE LINE MATERIAL CLASSIFICATION AS FOLLOWS FOR:
  - CONFIRMED LSLs, THE NOTIFICATION MUST ALSO INCLUDE INFORMATION ABOUT OPPORTUNITIES TO REPLACE THE LSL, ANY AVAILABLE FINANCING PROGRAMS, AND STATEMENT THAT THE SYSTEM MUST REPLACE ITS PORTION IF THE PROPERTY OWNERS NOTIFY THE SYSTEM THAT THEY ARE REPLACING THEIR PORTION.
  - GRR, THE NOTIFICATION MUST ALSO INCLUDE INFORMATION ABOUT OPPORTUNITIES FOR SERVICE LINE REPLACEMENT.
  - LEAD STATUS UNKNOWN, THE NOTIFICATION MUST ALSO INCLUDE A STATEMENT THAT THE SERVICE LINE IS UNKNOWN BUT MAY BE LEAD AND INFORMATION ABOUT OPPORTUNITIES TO VERIFY THE MATERIAL OF THE SERVICE LINE.

# DEVELOPING THE INITIAL INVENTORY

- INVENTORY UPDATES
  - OCCUR DURING THE SYSTEM'S NEXT ROUND OF TAP SAMPLING (ANNUAL OR TRIENNIAL)
  - THIS COULD CHANGE

# DEVELOPING THE INITIAL INVENTORY

- STATE REVIEW AND REPORTING – “WHAT WE WILL HAVE MAKE SURE YOU HAVE DONE.”
- GOT TO:
  - THE INVENTORY MUST INCLUDE ALL SERVICE LINES CONNECTED TO THE PUBLIC WATER SYSTEM REGARDLESS OF OWNERSHIP STATUS
  - THE SYSTEM MUST USE AND REVIEW THE SOURCES OF INFORMATION LISTED IN 40 CFR §141.84(A)(3) AND OTHER SOURCES OF INFORMATION IF APPROVED BY THE STATE. IN ADDITION, WATER SYSTEMS MUST IDENTIFY AND TRACK SERVICE LINE MATERIALS AS ENCOUNTERED IN THE COURSE OF NORMAL OPERATIONS.
  - SERVICE LINES, OR PORTION OF THE SERVICE LINE WHERE OWNERSHIP IS SPLIT, MUST BE CATEGORIZED AS LEAD, GRR, NON-LEAD, OR LEAD STATUS UNKNOWN.
  - A PUBLICLY ACCESSIBLE INVENTORY MUST INCLUDE LOCATION IDENTIFIERS FOR EACH LEAD AND GRR SERVICE LINE

# DEVELOPING THE INITIAL INVENTORY

- STATE REVIEW AND REPORTING – “WHAT WE WILL HAVE MAKE SURE YOU HAVE DONE.”
- GOT TO:
  - A PWS WITH LEAD, GRR, OR LEAD STATUS UNKNOWN SERVICES LINES IN THEIR INVENTORY MUST INFORM ALL PERSONS SERVED BY THE WATER SYSTEM AT THE SERVICE CONNECTION WITHIN 30 DAYS OF COMPLETION OF THE INITIAL INVENTORY AND REPEAT THE NOTIFICATION ON AN ANNUAL BASIS UNTIL THE SERVICE CONNECTION IS NO LONGER A LEAD, GRR, OR LEAD STATUS UNKNOWN LINE. THE NOTIFICATION MUST COMPLY WITH THE CONTENT AND DELIVERY REQUIREMENTS IN 40 CFR §141.85(E)(4). IN ADDITION, WATER SYSTEMS MUST DEMONSTRATE THAT THEY DELIVERED THE NOTIFICATION AND PROVIDE A COPY OF THE NOTIFICATION AND INFORMATION MATERIALS TO THEIR STATES ANNUALLY BY JULY 1 FOR THE PREVIOUS CALENDAR YEAR (CLY ACCESSIBLE INVENTORY MUST INCLUDE LOCATION IDENTIFIERS FOR EACH LEAD AND GRR SERVICE LINE.

# DEVELOPING THE INITIAL INVENTORY – FINAL POINTS

- **GOT TO**

- ALL SYSTEMS, INCLUDING SYSTEMS WITH ALL NON-LEAD SERVICE LINES, MUST CREATE AND SUBMIT THEIR INITIAL INVENTORY OF SERVICE LINES TO THEIR STATE BY **OCTOBER 16, 2024**. WATER SYSTEMS MUST BEGIN TRACKING MATERIALS AS THEY ARE ENCOUNTERED DURING NORMAL OPERATIONS BEFORE THE RULE COMPLIANCE DATE.
- NON-LEAD SERVICE LINES MUST BE DETERMINED THROUGH AN EVIDENCE-BASED RECORD, METHOD, OR TECHNIQUE NOT TO BE LEAD OR GRR.

- **COULD DO**

- WATER SYSTEMS SHOULD BEGIN ENGAGING CUSTOMERS AND CONDUCTING PROACTIVE, ON-SITE SERVICE LINE MATERIAL INVESTIGATIONS AS SOON AS POSSIBLE TO IMPROVE THEIR INVENTORY, VERIFY EXISTING RECORDS, AND REDUCE THE NUMBER OF UNKNOWNNS. WATER SYSTEMS SHOULD CAPTURE AS MUCH INFORMATION AS POSSIBLE FOR UNKNOWNNS AND CONSIDER ASSIGNING A LIKELIHOOD THAT THEY ARE LEAD (EPA'S THOUGHTS).
- NON-LEAD CLASSIFICATION COULD BE BASED ON WHEN LSLS WERE BANNED AND SERVICE LINES WERE INSTALLED, ALONG WITH PIPE DIAMETER (MOST LSLS ARE LESS THAN 2 INCHES).
- WHEN SYSTEMS HAVE CONFLICTING RECORDS OF SERVICE LINE MATERIALS, THEY SHOULD CONSIDER CLASSIFYING THE LINE AS UNKNOWN (OR LEAD IF ONE OR MORE INFORMATION SOURCES SUGGEST LEAD IS PRESENT) UNTIL THE CONFLICT IS RESOLVED (EPA'S THOUGHTS).
- EPA DISCOURAGES WATER SYSTEMS FROM SUBMITTING AN INITIAL INVENTORY WITH ALL UNKNOWNNS.
- THE INVENTORY IS A LIVING DOCUMENT THAT SHOULD BE CONTINUALLY IMPROVED OVER TIME.

# PUBLIC ACCESSIBILITY

- **GOT TO:**

- WATER SYSTEMS MUST MAKE AN INVENTORY OF THE LEAD AND GRR SERVICE LINES PUBLICLY ACCESSIBLE. THE PUBLICLY ACCESSIBLE INVENTORY MUST INCLUDE A LOCATION IDENTIFIER ASSOCIATED WITH EACH LEAD OR GRR SERVICE LINE. THE IDENTIFIER COULD BE A SPECIFIC ADDRESS; HOWEVER, THIS IS NOT REQUIRED UNDER THE LCRR.
- WATER SYSTEMS SERVING MORE THAN 50,000 PEOPLE MUST PROVIDE THEIR INVENTORY ONLINE.
- NON-LEAD SYSTEMS CAN FULFILL THE REQUIREMENT TO MAKE THE INVENTORY PUBLICLY ACCESSIBLE BY PROVIDING A STATEMENT THEY HAVE NO LSLs AND INCLUDING A GENERAL DESCRIPTION OF HOW THEY MADE THAT DETERMINATION.
- CWSS MUST INDICATE IN THEIR CCR HOW TO ACCESS SERVICE LINE INVENTORY INFORMATION. NON-LEAD CWSS MUST ALSO INCLUDE A STATEMENT THEY HAVE NO LSLs IN THEIR CCR.
- WITHIN 30 DAYS OF COMPLETION OF THE INITIAL INVENTORY, SYSTEMS MUST NOTIFY PERSONS SERVED BY LEAD, GRR, AND LEAD STATUS UNKNOWN LINES.



# PUBLIC ACCESSIBILITY

- **COULD TO:**

- CONSIDER THEIR DATA SHARING INFRASTRUCTURE, CUSTOMER DEMOGRAPHICS, AND STAFF LIMITATIONS WHEN SELECTING THE BEST METHOD FOR SHARING DATA WITH THE PUBLIC.
- CONSIDER ONLINE MAPPING APPLICATION AS A MEANS FOR DISTRIBUTING SERVICE LINE INVENTORY INFORMATION AND ALLOWS USERS TO COMPREHENSIVELY EVALUATE A WATER SYSTEM'S SERVICE LINE MATERIALS.
- ACCESSIBILITY AND INCLUSIVITY CONSIDERATIONS SHOULD BE MADE THROUGHOUT THE MAP DEVELOPMENT PROCESS.
- OTHER ONLINE DATA SHARING OPTIONS ARE AVAILABLE FOR WATER SYSTEMS, SUCH AS ONLINE CLOUD-BASED SHARING, ONLINE SPREADSHEET, FTP/SFTP SERVER, AND WEBSITE HOSTED DOWNLOAD.
- NON-WEB-BASED DATA SHARING OPTIONS INCLUDE PRINTED SERVICE LINE OR TABULAR DATA AS WELL AS INFORMATION ON WATER UTILITY MAILINGS OR NEWSLETTERS.
- ACTIVE COMMUNITY PARTICIPATION IN THE INVENTORY PROCESS HELPS CULTIVATE A MORE ROBUST INVENTORY DATASET.
- EPA SUGGESTS WATER SYSTEMS UPDATE THEIR INVENTORIES IN REAL-TIME OR AS CLOSE AS POSSIBLE.

# MAJOR POINT TO CONSIDER

- THE LEAD AND COPPER RULE REVISIONS (LCRR) ARE NOT COMPLETE
- THE EPA HAS STATED THAT THE RULE WILL EVOLVE PRIOR TO THE OCTOBER 2024 FULL IMPLEMENTATION DATE.
- WHAT THAT MEANS:
  - CERTAIN ELEMENTS OF THE RULE CAN CHANGE FURTHER
  - REQUIRED SERVICE LINE INVENTORY ELEMENTS COULD INCREASE BEYOND THE BASICS.

The background is a light blue gradient with several realistic water droplets of various sizes scattered across the top and bottom edges. The droplets have highlights and shadows, giving them a three-dimensional appearance.

# NEXT STEPS FOR YOU AND YOUR SYSTEM

- GETTING YOUR INVENTORY TOGETHER
- HOPEFULLY, YOU HAVE GATHERED SOME OF THE NECESSARY INFORMATION TOGETHER
- 1<sup>ST</sup> STEP TOWARDS COMPLIANCE WITH THE REVISED RULE

# OUR APPROACH FOR THE STATE

- START WITH AN EXCEL BASED SPREADSHEET
- NEED TO BE STANDARDIZED FOR EASE IN CAPTURING THE DATA LATER FOR REPORTING
- WILL HELP IN CREATING YOUR NEW SAMPLE SITE PLAN FOR YOUR SYSTEM
- REMEMBER THERE WILL BE 5 TIERS LCRR VS. 3 LCR
- TO AID IN ENSURING THE SHEET MEETS THE NEEDS AND MEETS THE REQUIREMENTS, I HAVE A COUPLE OF QUESTIONS...

# WOULD AN APP FOR COLLECTION BE HELPFUL

GARDEN Sites More... ? Logout


Apply Filters Export... Create Site

ID	Account Number	Customer Name	Service Address 1	City	State	ZIP	Last Survey
							From To <input type="checkbox"/> Blank
9	520002221	Donna's High Quality Trailer Park	113 ICI LN	Sample Town	LA	12345	
11	225022400	Ailments -R-Us	441 MAPLE LOOP	Sample Town	LA	12345	
12	77777	Breaux Mart	7777 PARIS RD	Chalmette	LA	70032	
13	77777	Versailles Park	1100 MAGISTRATE ST	Chalmette	LA	70032	
14	611175	Billy's Subway	8875 HIGHLAND R	Baton Rouge	LA	70808	
15	231654362	Highland Shadows	9632 HIGHLAND RD	Baton Rouge	LA	70810	
5	630000600	LeBas Funeral Home	142 W 1ST ST	Sample Town	LA	12345	
10	205015708	Old Man Mitch's Nursing Home	626 W 5TH ST	Sample Town	LA	12345	

<b>Customer</b> Donna's High Quality Trailer Park	
<b>Service Address</b> 113 ICI LN	
<b>Account Number</b> 520002221	<b>Meter Number</b> 
<b>Survey Date</b> 10/26/2022	<b>Plumbing Installation Date</b> 
<b>Site Type</b> 	<b>Site Use</b> 
<b>Facility Plumbing Material 1</b> 	<b>Facility Plumbing Material 2</b> 
<b>On Site Water Treatment</b> <input type="radio"/> Yes <input type="radio"/> No	<b>Service Connections Present</b> <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Fire <input type="checkbox"/> Irrigation
Domestic Line	

# CUSTOMER INFO

# SERVICE LINE INFORMATION

 Sites More... ? Logou

Domestic Line ^

**Connection Location**

**Install Date**  
mm/dd/yyyy

**Water System Side Size**

**Material**

**Customer Side Size**

**Material**

**Lead Connector Present**  
 Yes  No

**Previously Connected To Lead**  
 Yes  No  Unknown

**Line Galvanized**  
 Yes  No

**Verification Source**

The background is a light blue gradient that transitions from a pale blue at the top to a slightly darker blue at the bottom. Scattered throughout the background are several realistic-looking water droplets of various sizes, some with highlights and shadows, giving them a three-dimensional appearance. The droplets are more densely clustered in the top-left and bottom-right corners.

**LOOKING TO SPREADSHEETS...**