

LEAD SERVICE LINE INVENTORY & REPLACEMENT PROJECT

A Summary of Project Context, Design, Implementation, and Goals

Lead Service Line (LSL) Team: Aurora Bas and Tim Brinkman

PROJECT ORIGIN

“Today, the Biden-Harris Administration is releasing its Lead Pipe and Paint Action Plan. The plan represents a historic effort of unprecedented ambition that will deploy catalytic resources from the Bipartisan Infrastructure Law while leveraging every tool across federal, state, and local government to deliver clean drinking water, replace lead pipes, and remediate lead paint. The plan includes over 15 new actions from more than 10 federal agencies that ensure the federal government is marshalling every resource to make rapid progress towards replacing all lead pipes in the next decade.”

White House Briefing Room

December 16, 2021

40 CFR §141.84 (EPA)

(a) Lead service line inventory. All water systems must develop an inventory to identify the materials of service lines connected to the public water distribution system.

(b) Lead service line replacement plan. All water systems with one or more lead, galvanized requiring replacement, or lead status unknown service lines in their distribution system must, by October 16, 2024, submit a lead service line replacement plan to the State in accordance with §141.90(e).

MOTIVATION

- Lead exposure can be seriously detrimental to anyone
 - Specifically, pregnant women and young children
 - Can cause birth defects, developmental delays, and behavioral problems
- Mass DEP has a lead maximum contaminant level (MCL) goal of 0 mg/L (ppm)
 - Current MCL is 0.015 mg/L (15 ppm)
 - 90% of our Q3 2022 lead samples were at or below 0.002 mg/L (2 ppm)

Goal: remove relevant water infrastructure to eliminate lead exposure via potable water

REDUCTION OF LEAD EXPOSURE

LRWU PROTOCOL

- Maintain effective corrosion control (via zinc orthophosphate)
- Abide by directives to prepare the system and public for lead service line replacement
- Complete annual lead sampling
- Abiding by all directives from EPA/Mass DEP
- Stay up-to-date on relevant regulations
 - Includes attending training sessions and maintaining open communication with Mass DEP

ADDITIONAL PRECAUTIONS

- If you are concerned about lead exposure, you may:
 - Prior to using water, run your taps for 1-2 minutes after 6+ hours of no use
 - Use a National Sanitation Foundation (NSF) Standard 53 water filter
 - Only use cold water for drinking, cooking, mixing baby formula, etc. , and heat on stove top
 - Please note that boiling water does *not* reduce the concentration of lead

PROJECT IMPLEMENTATION

PHASE I: INVENTORY

- Review existing records to develop an initial water service line material database (public and private sides)
- Will be funded via State Revolving Fund (SRF)
 - This round of funding will have *100% loan forgiveness*
- Verify all water service lines suspected to contain:
 - Lead
 - Galvanized material(s)
 - Unknown material(s)

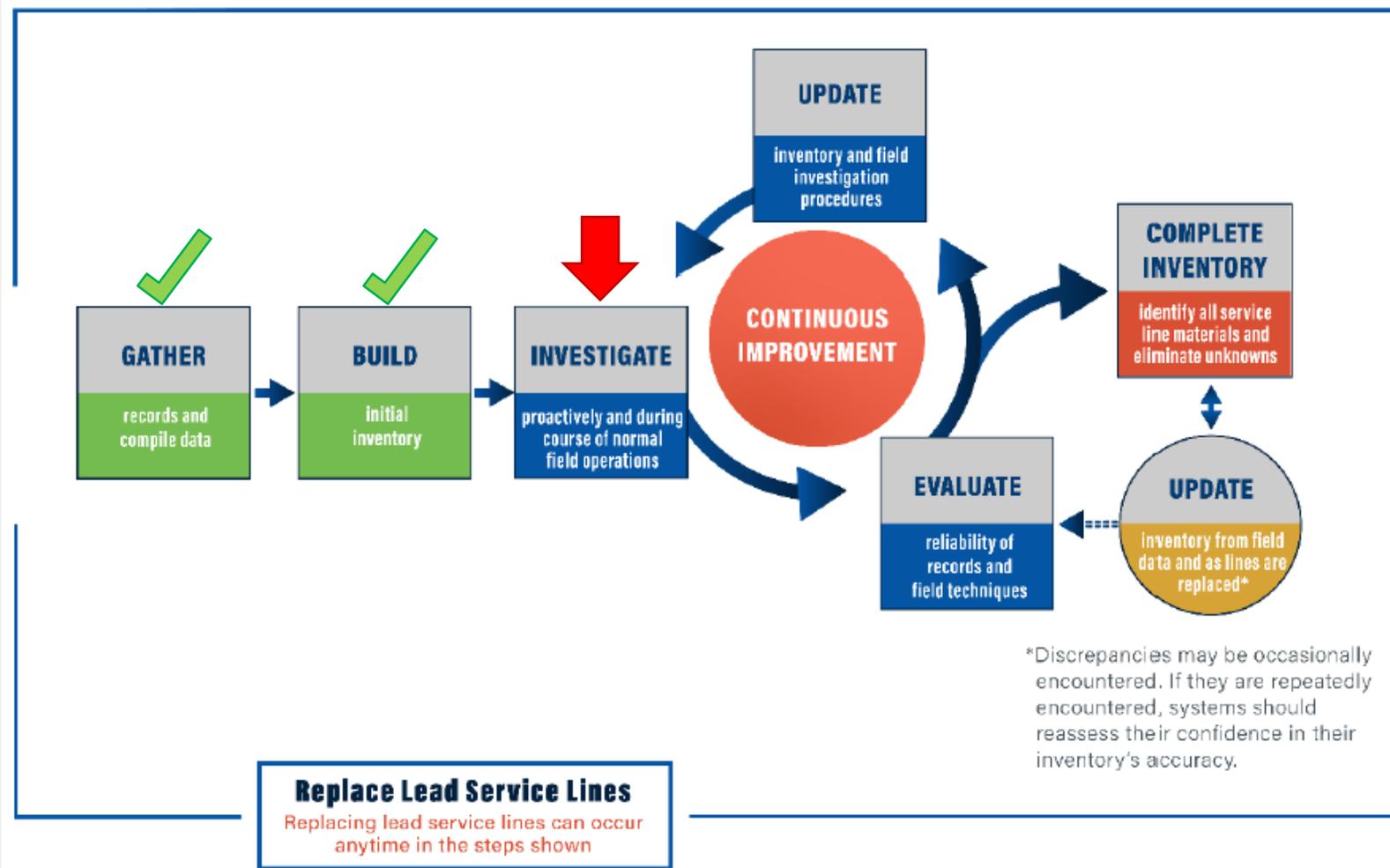
PHASE II: REPLACEMENT

- Once these lines are identified, service lines leading up to the water meter containing lead or galvanized materials must be replaced
- Funding has not yet been announced, but we anticipate that it will become available closer to the time of inventory submittal
- Will be completed by an external contractor

Water service line inventory must be submitted to Mass DEP by October 16, 2024

Lead must be removed by October 2029

WE ARE HERE



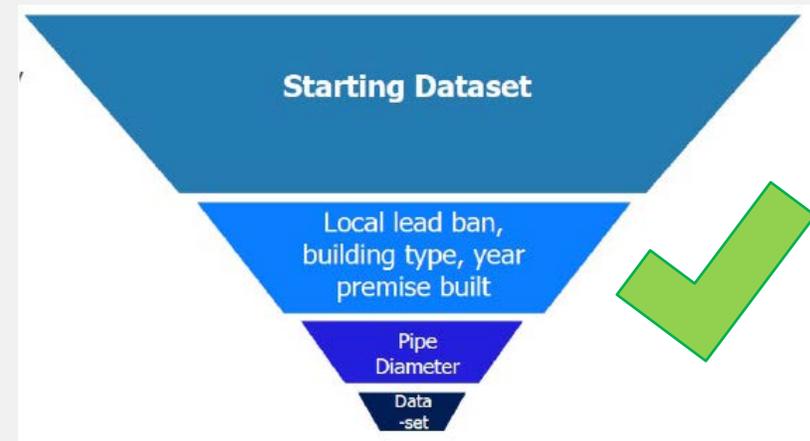
PROGRESS THUS FAR

LRWU

- Initial inventory based upon review of service cards and institutional knowledge
- Design of data collection/submittal template, survey forms, dedicated web page on the LRWU site, and notices to residents
- Continuing to replace public lead lines as discovered during normal operations
- Identifying methods to verify public and private side inventory
- Researching and proposing use of non-invasive equipment for public side inventory

CONTRACTOR

- Completion of 75% design documents
- Initial draft of SRF application



Source: EPA's "Guidance for Developing and Maintaining a Service Line Inventory"

CONTINUING PHASE I: INVENTORY

OBJECTIVE: VERIFY PRIVATE SIDE

- Private side inspection breakdown:
 - 36 suspected galvanized
 - 246 suspected lead
 - 50 suspected lead lined
 - 135 unknown
 - Total: 467

Anticipated Time: 3 months

OBJECTIVE: VERIFY PUBLIC SIDE

- Public side inspection breakdown:
 - 2 suspected galvanized
 - 221 suspected lead
 - 23 suspected lead lined
 - 43 unknown
 - Total: 289

Anticipated Time: TBD by Pilot Program

PREPARING FOR PHASE II: REPLACEMENT

OBJECTIVE: UTILIZE PHASE I DATA

- Using the data collected during Phase I, the LSL team must finalize the water service line inventory
- Phase I data will inform replacement plans, such as how many service lines will actually need to be replaced
- A replacement plan must be included with the inventory submittal by October 16, 2024

OBJECTIVE: ASCERTAIN FUNDING

- Once the replacement plan is finalized, the LSL team will fully comprehend the anticipated scope of work
- This scope of work will be reflected in an application for external funding

Replacement of service lines up to the meter as part of this project will be performed at no expense to residents

OUR COMMITMENT TO YOU

- Public outreach/education
 - Notices to residents and other relevant parties
 - Website information (ETA February 1, 2023)
 - Providing updates/new information as available
 - Scheduling appointments
- Compiling inventory data into a publicly available map so all residents can easily research the locations of the lead/galvanized services
- Addressing questions, comments, and concerns

TRANSPARENCY AND COMMUNICATION

- When you receive a notice, please contact us to schedule an appointment (contact info to be included within the notice)
- Please ensure someone is on site to allow us into the basement/cellar/water meter area
- If you cannot keep your appointment, please notify us as soon as possible

We greatly appreciate your participation and understanding.

COMMENTS OR QUESTIONS?

Points of Contact

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