

Service Line Inventory Project Overview

Bellefonte Borough Council Work Session

June 17, 2024

Bellefonte Water System Background

- The Bellefonte Borough Authority owns and operates the Bellefonte Water System. Through a Management Agreement, Bellefonte Borough provides the staffing and takes care of the day-to-day activities. The Authority meets on a monthly basis. See the Bellefonte Borough website for more details.
- The Bellefonte Water System is directly regulated by PA DEP and indirectly regulated by US EPA. Other governmental entities and Legislative Acts may also apply.

What is a service line and who owns it?

A water service line or lateral is the small diameter pipe that connects the water main in the street to your home or building.

Service lines can be made of copper, galvanized steel, iron, plastic, or lead.

The owner of the property owns the water service line from the home to the curb stop or shut off valve. The Bellefonte Borough Authority owns the rest of the water service line - from the curb stop to the water main.

Service Line Inventory

Water systems must inventory all service lines and submit the inventory to PA DEP by October 16, 2024. Water suppliers must include the classification of each line according to the material in their inventory. The classifications include the following:

- Lead
- Non-lead
- Lead status unknown
- Galvanized requiring replacement (GRR)

What is being done?

- The Borough/Authority is working on identifying the service lines on the system-owned (Authority) service lines in our water distribution system. We are reviewing historical records, including site plans, plumbing records, maps and will conduct field verifications as needed. Under the Rules, options for verification are limited. One way is to expose the service line at a specified distance on each side of the curb box and ID the material. A third check must be completed as well. This can be done where the service line comes into the structure.

The Borough/Authority does not have comprehensive records of the type of material for customer water service lines. We will need your help to complete this inventory.

Submitting Photos/Information

Customers can help identify their service line by filling out a form and taking a picture of the water service line where it enters the home/business.

[1. www.Bellefonte.net](http://www.Bellefonte.net)

2. Service Line Inventory Information

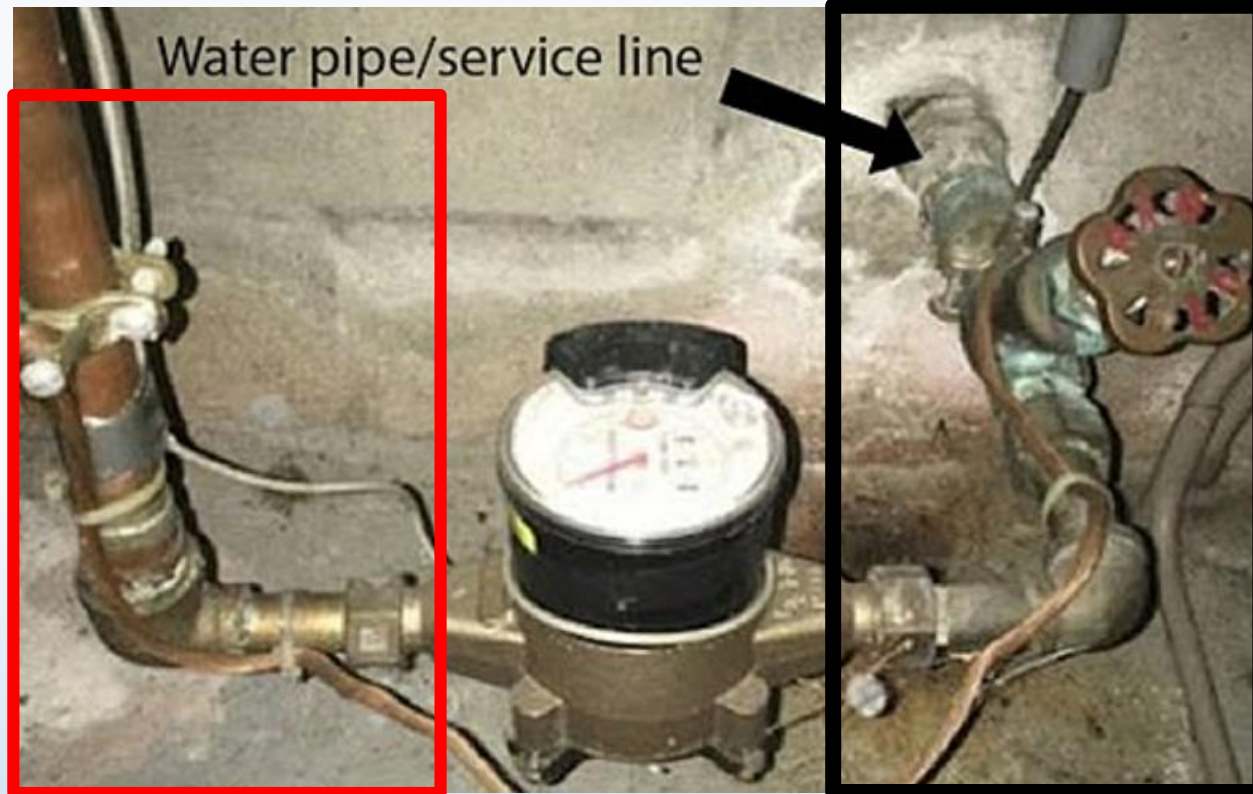
3. Click on the link for the form <https://forms.office.com/r/KpDh2Prurh>

Borough Website Form

- 1.Full Name
- 2.Address
- 3.Phone number
- 4.Email address
- 5.Today's date
- 6.Where is the Water Meter located?
- 7.What is the size of Service Line coming into the Building?
- 8.Submit photos to boro@bellefontepa.gov

What Needs to be captured in the Photo

This side entering the rest of the home is considered **premise plumbing** and is **not required** for the system inventory.



Make sure to include this section of your service line that is **entering the home from outside** in your photo! This section closest to your house's exterior is **your service line!**

What Can You do to Help?

Protect your Tap: A Quick Check for Lead Guide

1. You can find out what materials your service line is made of!

The Environmental Protection Agency (EPA) has an online step-by-step guide- “Protect your Tap: A Quick Check for Lead” to help people identify lead service lines in their homes. It also provides tips on actions to reduce lead exposure in drinking water, information on certified laboratories for water testing, and resources to learn more.

Find it here: <https://www.epa.gov/ground-water-and-drinking-water/protect-your-tap-quick-check-lead>



Service Line Material

The EPA “Protect Your Tap” Guide provides examples of different service line materials you may find, to help you identify your service line material.



Plastic



Scratched Lead



Copper



Galvanized Steel & valve

Water Service Line Material Examples



Lead

Dull silver-grey, easily scratched



Galvanized Steel or Iron

Dull silver-grey, magnetic

Water Service Line Material Examples



Copper

Color of a penny, metallic, non-magnetic



Plastic

White, beige, blue, or black, non-metallic

Why are we mandated to do this?

The Lead and Copper Rule is a United States federal regulation first issued in 1991 by the Environmental Protection Agency (EPA).

The purpose of the Lead and Copper Rule (LCR) is to protect public health by minimizing lead and copper levels in drinking water, **primarily by making water less corrosive**. When water is corrosive, the lead and copper found in plumbing materials can leach into your drinking water.

Water systems are required to sample the water from consumer's homes on a specific frequency, which is either every 6-months, annually or triennially (once every 3 years). An action level exceedance occurs if the results from more than 10% of the homes tested are above the action level.

The Bellefonte System is on a 3-year testing cycle.

Flint Michigan Water Crisis

- The Flint Michigan water crisis started in 2014 when Flint switched its source of water. The new source was corrosive and **no related treatment was done** which created a public health emergency in 2015 due to elevated levels of lead in water across the city.
- This incident spurred new interest in looking at options for reducing lead in drinking water.

Lead and Copper Rule Revisions (LCRR)

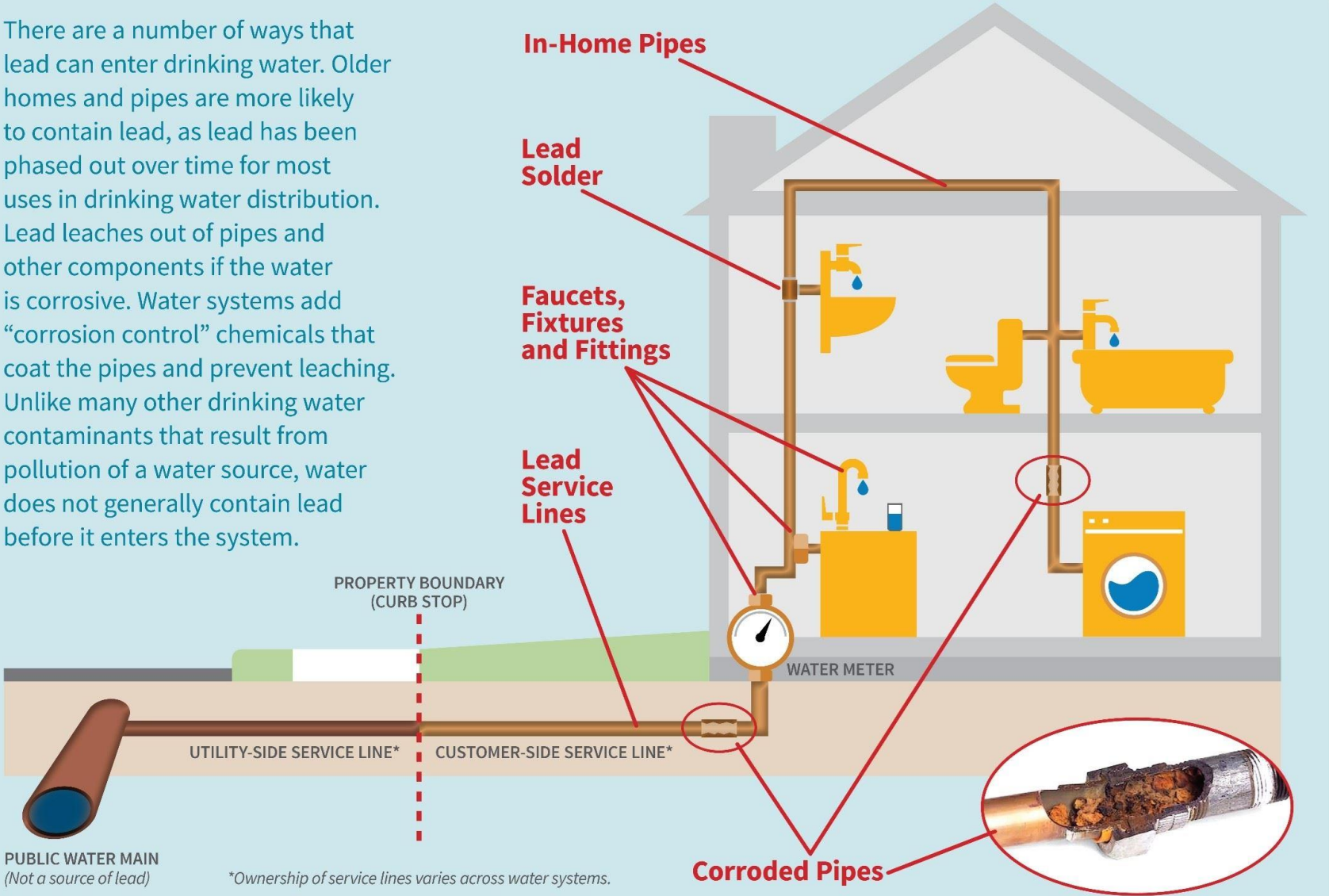
- In January 2021, the EPA [published an updated version](#) of these regulations titled the Lead and Copper Rule Revisions (LCRR).
- The changes require all water systems to submit an inventory of their service line materials. **The LCRR compliance date for all water providers is October 16, 2024.**

Lead and Copper Rule Improvements (LCRI)

- In November 2023, the EPA announced its intention to have another update to the Lead and Copper Rule, called [the Lead and Copper Rule Improvements](#) (LCRI).
- The LCRI includes proposals to completely replace lead pipes within 10 years, improve the tap sampling process and identify all service lines with unknown materials.
- The LCRI has not been finalized.

How Lead Gets Into Drinking Water

There are a number of ways that lead can enter drinking water. Older homes and pipes are more likely to contain lead, as lead has been phased out over time for most uses in drinking water distribution. Lead leaches out of pipes and other components if the water is corrosive. Water systems add “corrosion control” chemicals that coat the pipes and prevent leaching. Unlike many other drinking water contaminants that result from pollution of a water source, water does not generally contain lead before it enters the system.



PUBLIC WATER MAIN
(Not a source of lead)

*Ownership of service lines varies across water systems.

Corroded Pipes

What about Bellefonte Water?

Water sources typically do not contain lead. If water is corrosive and not treated accordingly, it can cause the lead in piping, plumbing, etc. to leach out into the water.

If the source is corrosive to the point that action levels are exceeded, then the water system would be mandated to treat the water for corrosiveness. The Bellefonte Water System is not under any mandate to treat its water for corrosiveness.

PA DEP Drinking Water Reporting System

DRINKING WATER REPORTING SYSTEM



Welcome | [Selection Criteria \(SelectionCriteria.html\)](#) | [Contact Us \(mailto:pa-dwr@state.pa.us?subject=DWRB_Feedback%20Help\)](mailto:pa-dwr@state.pa.us?subject=DWRB_Feedback%20Help) *

Welcome to the Drinking Water Reporting System (DWRB). The DWRB allows public access to public drinking water systems' sample history, inventory information and recent violation history. Based on selection criteria provided by the user, information will be displayed for a single water system or multiple systems. For instructions on how to use DWRB [click here \(http://www.drinkinwater.state.pa.us/DWRB_Instructions.pdf\)](http://www.drinkinwater.state.pa.us/DWRB_Instructions.pdf).

- Monitoring Requirements are updated in February of each year to reflect changes caused by end of year monitoring compliance determination.
- Disclaimer: This information is provided as an assistance tool, it may not dictate all monitoring requirements for all systems and DOES NOT supersede DEP regulatory requirements.
- An information request for "Sample History" includes all sample results submitted to Pennsylvania's Safe Drinking Water program within the last five years.
- An information request for "Summarized Sample Results" provides one or more of the following data sets:
 - Turbidity Summary Data
 - Total Coliform and Disinfectant Residual Summary Data
 - Lead and Copper 90th Percentile Value and Summary Data
 - Total Organic Carbon (TOC) Report
- Information on "Detailed Sample Results" is available by selecting one of the contaminant groups (SOC, IOC, VOC, etc) and/or individual contaminants.
- An information request for "Inventory Information" includes source, entry point, treatment plant and contact information as well as a system's monitoring requirements.
- "Violation History" includes monitoring and reporting violations and resulting enforcement actions taken against a water system in the last five years.

*** DO NOT USE THIS ADDRESS FOR SUBMITTING A FORMAL RIGHT TO KNOW LAW REQUEST. INQUIRIES SENT HERE WILL BE HANDLED INFORMALLY.** If you are seeking DEP records, please begin your inquiry by clicking [here \(https://www.ahs.dep.pa.gov/RTK/RTKRequest/Create\)](https://www.ahs.dep.pa.gov/RTK/RTKRequest/Create) to obtain a request form. You may submit a Right to Know Law request form by e-mail to [EP-DEP-RTK@pa.gov \(mailto:EP-DEP-RTK@pa.gov\)](mailto:EP-DEP-RTK@pa.gov).

[Continue to DWRB \(SelectionCriteria.html\)](#)

[About DEP \(](#)

[eFACTS](#)

[DEP Drinking Water](#)

[DEP GreenPort/DWELB](#)

[CCR](#)

[PA Water Plan](#)

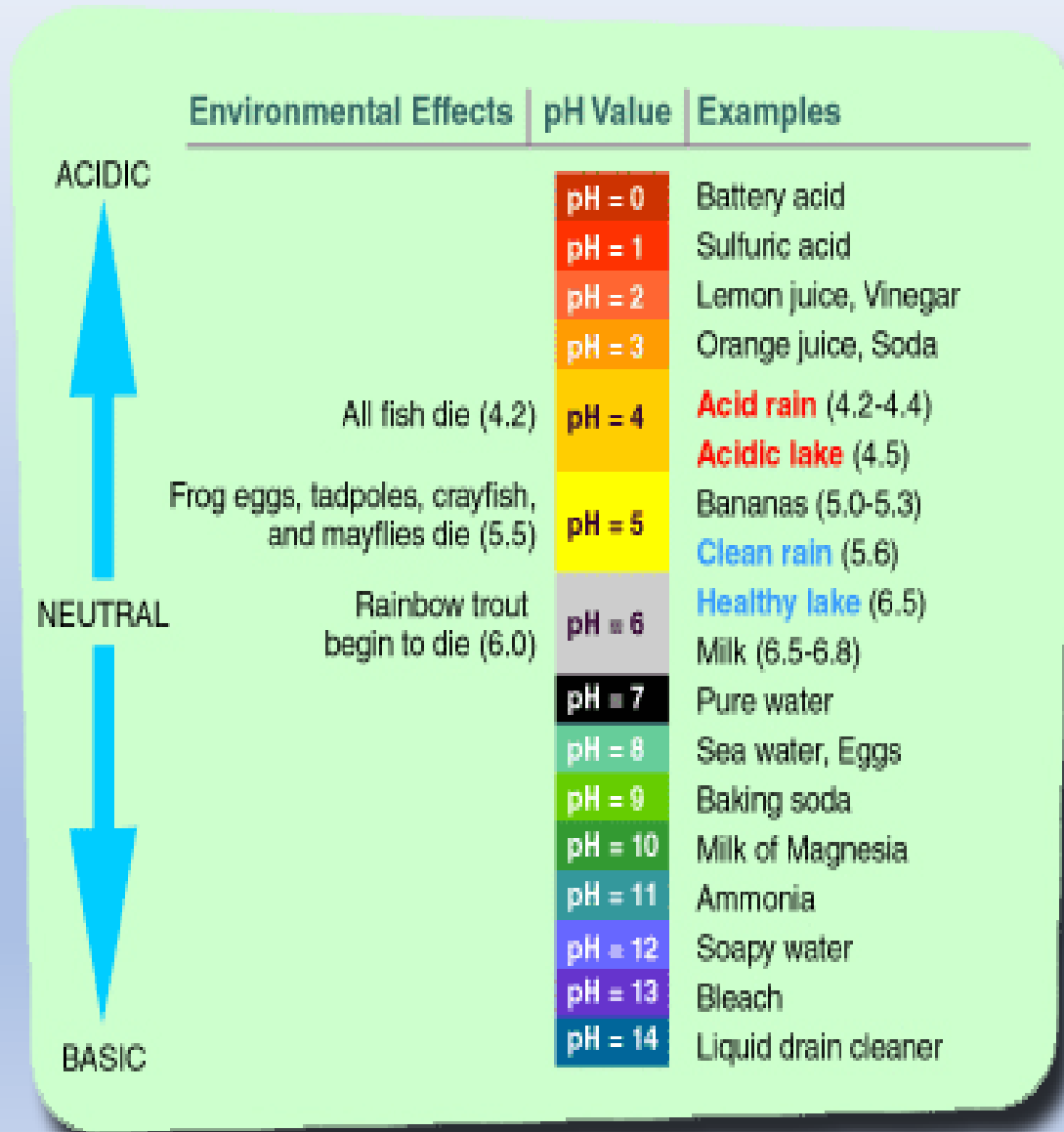
<http://www.dep.pa.gov/About/AboutStateofPA/AboutPADEP/AboutPADEP.aspx> | <http://www.dep.ceenport.state.pa.gov/CENPort/About/AboutCENPort.aspx> | <http://www.dep.pa.gov/Business/Water/Business/About/AboutPADEP/AboutPADEP.aspx>

<http://www.dep.pa.gov/Business/Water/Business/About/AboutPADEP/AboutPADEP.aspx>

Confidence:

Reports.aspx?VKC7F5Mo59A1

The pH of Big Spring water



- The pH scale measures how acidic (corrosive) or basic a substance is. It ranges from 0 to 14. A pH of 7 is neutral, a pH less than 7 is acidic, and a pH greater than 7 is basic. Each pH value is ten times more or less than the next level.

The Bellefonte Big Spring water is fairly consistent and has a pH of 7.6 – 8.0 or on the Basic side.

Bellefonte has hard water, how does that impact lead and copper in the water?

Hard water is “scale forming”. This scale, made of precipitated calcium carbonate, builds a layer on the inside of pipes and fittings. This helps to isolate the water from the pipes and fittings that may contain lead and lowers the ability for lead to be leached from pipes and fittings into the water. The hardness of Bellefonte water is 9.2 grains/gallon or 158 mg/L.

Water Hardness Scale		
Grains/Gallon	mg/L & ppm	Classification
Less than 1	Less than 17.1	Soft
1 to 3.5	17.1 to 60	Slightly hard
3.5 to 7.0	60 to 120	Moderately hard
7.0 to 10.5	120 to 180	Hard
10.5 and over	180 and over	Like a stone
Note - one grain per gallon = 17.1 parts per million (ppm)		

Reducing Your Exposure to Lead

- If you think you have a lead service line or lead materials in your plumbing and want to reduce your exposure to lead, you should do the following:
- **Use only cold, fresh water for drinking, cooking, and preparing baby formula.** Run the water for at least 1 minute or until after it turns cold.
- **Do not boil the water to remove lead.** Boiling water will not reduce lead. Excessive boiling of water makes the lead and copper more concentrated – the lead and copper remains when the water evaporates.
- **Test your home for lead:** The only way to determine the level of lead in drinking water at your home is to have the water tested by a state certified laboratory. Consider having your paint tested also.

Questions

Contact Bellefonte Borough

Phone: 814-355-1501

Email: boro@bellefontepa.gov