

City of Richmond Service Line Material Self Reporting Survey



DEPARTMENT OF
PUBLIC UTILITIES

The City of Richmond is developing a publicly available inventory of water service lines (the service line is a pipe that runs horizontally from the water main in the roadway to a building's interior plumbing) as part of a mandate by the U.S. Environmental Protection Agency's Lead and Copper Rule Revisions. The purpose of the inventory is to identify the horizontal service line material so that those service lines made of lead or galvanized steel can ultimately be replaced.

Step 1: Find Your Property - Scan the QR code or go to this website:

<https://arcg.is/10bP4>. Is the Customer-owned service line material unknown and is the survey link active? If yes, follow these steps to determine your material type and fill in the survey!

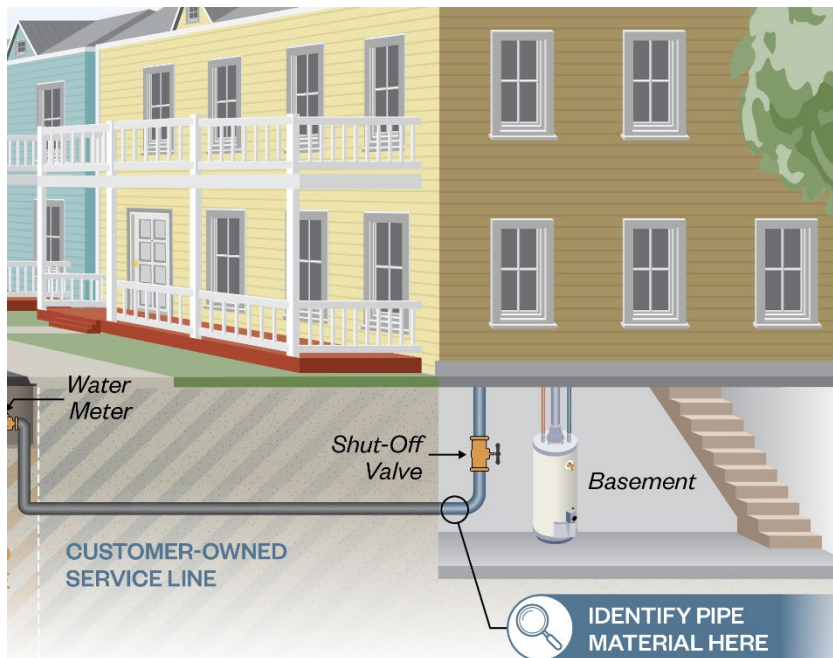


Step 2: Gather Materials

- Flashlight
- Key, coin, or screwdriver
- Magnet
- Camera or phone
- Sticky note

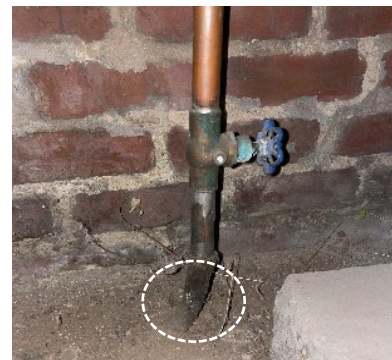
Step 3: Locate Your Water Service Line Where it Enters the Building

The service line can often be seen where it enters a building in the crawlspace or basement. **It's key to identify the service line material on the part of the pipe closest to where the line enters the building from the ground.** Tip #1: Finding your water meter outside can give you a clue as to where the line may enter your building. Tip #2: Find your water shutoff valve and trace the plumbing line back to where the line enters the building.



What if I can't see where the service line enters the building?

See Additional Tips and Notes.



Why is Identifying the Material Where the Pipe Enters the Building Important?

Sometimes interior plumbing has been updated to non-lead, but the buried service line is still lead or galvanized. In this example, the interior plumbing is copper and plastic, but pulling back the vapor barrier shows the service line is still lead.









Step 4: Magnet Test

Place a magnet on your water service line where it enters the building. Note if it sticks or not.

Step 5: Scratch Test

Using a key, coin, screwdriver or other tool, lightly scratch your water service line where it enters the building. Note the color of the pipe when scratched.

Step 6: Determine the Pipe Material – key differentiators are circled below. Tip #3: Lead pipes sometime have a “bulb” and appear to bend. Plastic pipe can be white, grey, blue, black, or other colors.

PIPE MATERIAL	 <p>Copper</p>	 <p>Galvanized</p>	 <p>Lead</p>	 <p>Plastic/HDPE/PVC</p>
SCRATCH RESULT	Copper or orange color	Dull gray color	Shiny silver color	Matches surface
MAGNET RESULT	Not magnetic	Magnetic	Not magnetic	Not magnetic
TAPPING RESULT	Metallic, ringing noise	Metallic, ringing noise	Dull noise	Dull, plastic noise

Step 7: Take 2 Photos so the City can Validate Results before Posting to the Public Map

The first photo should be a close-up of the pipe. The photo should show the wall or ground where the pipe is entering and show the scratched area and magnet (if it stuck). The second photo should show a zoomed out view of the pipe as it enters the building and also show the scratched area and magnet (if it stuck). Tip #4: If there are multiple pipes in either photo, label the pipe you are identifying with a sticky note so the City can validate your submittal.



Photo 1: Close-up of scratch & magnet test and point of pipe entry from the ground or wall

Photo 2: Zoomed out showing scratch & magnet test and point of pipe entry from the ground or wall



Still Need Help?

Contact the Lead Free Water Helpline: 804-646-8600 or reach out to a plumber participating in the Service Line Inventory Plumber Program for a free material identification if your property is eligible. See QR code or

[City's Preferred Plumbers List for Free Service Line Inspections](#) for more detail.



Additional Tips and Notes

- **Inaccessible lines:** Sometimes service lines cannot be seen where they enter a building. If you're not sure whether you can see the line, you can either call a plumber that is participating in our SLI Plumber Program, or you can submit self-reporting results for the portion of the line that you can see, following steps 4-8 for the portion you can see. If any visible portion of the line is lead or galvanized, the City will consider the horizontal portion in the ground to be lead or galvanized. If the visible portion is copper or plastic, the City will need to identify the buried pipe material using a different method. Once a line is determined to be inaccessible, the City will disable the self-reporting survey link.



Drywall or other material covers entry point.



Crawlspace is too narrow to enter.



Horizontal pipe between wall and first pipe bend/fitting is not visible. Still submit photos of a scratch/magnet test for the portion that is visible.

- **No need to open the water meter:** The pipe that is visible at the water meter is often a connector pipe that may not be the same material as the buried service line. Therefore, opening the water meter is not necessary.
- **Photo Don'ts:** Since the City must validate survey submittals before the results are posted in the public inventory, we appreciate clear, well-lit photos that follow the instructions in Step 7. Below are examples received which cannot be validated.



Does not show the entry point of the pipe into the building and a scratch/magnet test



Shows multiple pipes without labels, and the scratch/magnet test is not visible