

SERVICE LINES AND PLUMBING FIXTURES

Lead and Copper in Water Questions & Answers – Water Quality Work Group Review DRAFT 2

16. How do I determine what material my service line is made of?

Service lines can be made of plastic, copper, lead or galvanized steel. Local construction practices and ordinances impacted the type of pipe material used in communities at specific times. The State of Michigan Building Code of 1947 prohibited lead pipe in new construction. Some communities used a small connector pipe made of lead, commonly called a gooseneck, to connect a galvanized steel service line to the water main.

Two simple tests can be performed using a screwdriver and a magnet to help determine your service line material. Locate where the service line comes into your house. This should be near your main water shutoff valve and water meter. Use the flat edge of a screwdriver to carefully scratch through any corrosion that may have built up on the outside of the pipe. If the scraped area is:

- shiny, silver in color, and looks like a nickel, it is made of lead. The magnet will not stick to lead.
- copper in color and looks like a penny, it is made of copper. The magnet will not stick to a copper pipe.
- dull gray in color and the magnet sticks to the surface, it is galvanized steel.

Plastic pipe is usually white or grey in color, and the piping is typically joined with a clamp, but some may be screwed together or glued.



Lead pipe (may want to make label part of picture)



Galvanized steel pipe



Copper pipe



Plastic pipe

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17. Do I need to test my water for lead if I have a lead service line?

Testing is the only way to confirm if lead is present in your drinking water. Samples are taken from the faucet that is normally used for drinking water. If you are concerned, a lead test can cost between \$10.00 and \$75.00. A list of local certified drinking water chemistry laboratories that perform lead and copper testing can be found on MDEQ's website http://www.michigan.gov/deq/0,4561,7-135-3307_4131_4156-36940--,00.html. You can also contact your County Environmental Health Department or the municipality you live in for further direction and information.

Some laboratories report results in different units of measurement. Parts per billion (ppb), the detection level unit for lead, is the equivalent of micrograms per liter (ug/l).

18. What should I do if I have a lead service line and my water quality results indicate a presence of lead?

A measure of household consumer safety for acceptable lead levels has not yet been determined. Therefore, if you have a lead service line and analytical results reveal a presence of lead, you may consider the following practices to minimize your exposure to lead:

- Running your water is a simple and inexpensive measure you can take to protect your family's health. Run your tap water for 30 seconds to 2 minutes any time the water in a faucet has gone unused for 6 hours or more, such as in the morning, when you've been away during the day, when you return from vacation, and when an individual tap in your home is not used regularly. It usually takes less than 1-2 gallons of water a day. Household water usage activities such as showering, washing clothes and running the dishwasher are effective methods for flushing the pipes.
- Always use cold water for drinking, cooking and preparing baby formula.
- You may also wish to use a home filter for water used for drinking and cooking, particularly if you are pregnant or have children under age 6. This is especially important if you are making baby formula. Make sure the filter is certified for lead removal by NSF. Follow the manufacturer's recommendations for replacement. Contact NSF International at 800-NSF-8010 or visit their website at www.nsf.org
- Remove and clean the faucet screen/aerator monthly.
- Consider replacing faucets installed prior to 2014.

Additional information can be found at www.epa.gov/safewater/lead.

19. How can I tell if my plumbing fixtures have lead or lead solder in them?

If your home was built before 1986, your home's plumbing likely contains faucets and pipes with some lead content and lead solder. Brass and chrome-plated brass faucets and fittings contain some lead. Brass fixtures and copper pipes can be joined with lead solder. From 1986 to 2014, brass faucets and fittings sold in the US that were labeled as "lead free" could contain up to 8% lead. In January 2014, the Reduction of Lead in Drinking Water Act redefined "lead free" as "not more than a weighted average of 0.25% lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures."

Consumers can increase their confidence level by purchasing products certified as meeting Safe Drinking Water Act lead-free requirements. Information can be found at:

http://www.nsf.org/newsroom_pdf/Lead_free_certification_marks.pdf

20. If corrosion control is working, how can there still be higher levels of lead in the first draw sample in the morning, after water has sat in the pipe?

Orthophosphate treatment is provided to reduce the amount of lead that can leach into your drinking water. It does not remove lead from the water but binds with the lead plumbing material, reducing the amount of lead dissolved in the water. The longer water is in contact with lead plumbing materials the more likely lead will dissolve in the water.

21. What portion of the service line is the homeowner's responsibility?

Homeowner responsibility varies by community. In some communities, the homeowner is responsible for the portion of the line from the curb stop in their yard, where the shutoff valve is, into their home. In other communities, homeowners may own the entire service line from the home to the connection to water main. If you have a question about who owns which components of the water system, contact your local municipality.



Shared Ownership of Service Line



Property Owner Responsible for Service Line