

## Frequently Asked Questions about Galvanized Pipes

Due to the age of some of the homes in the area, galvanized pipes are a common problem. HMUA has 68 customers with galvanized lines from curb stop into the home (“customer side”). There are no galvanized services from HMUA main to curb stop (“utility side”). Below is our list of the most frequently asked questions about galvanized pipes.

### What are galvanized pipes?

Galvanized pipes are steel pipes that have been dipped in a protective zinc coating to prevent corrosion and rust. Galvanized piping was commonly installed in homes built before 1960. When it was invented, galvanized pipe was an alternative to lead pipe for water supply lines. Today, however, we have learned that decades of exposure to water will cause galvanized pipes to corrode and rust on the inside.



### What do galvanized pipes look like?

When first installed, galvanized pipe looks similar to a nickel in color. But as it ages, galvanized pipe may appear much duller, lighter, or darker, depending on its environment. We’ve also seen homes where the water pipes have been painted, so it can be difficult to tell at first glance.



### **How can I tell if I have galvanized pipes?**

If you can't tell by looking at your pipes, there is a quick test to tell if they are galvanized. Simply grab a flat head screwdriver and a strong magnet. Start by finding your water line and scratch the outside of the pipe with the screwdriver. Compare your results:

#### **Copper**

The scratched area will look like a copper penny. A magnet will NOT stick to it.



#### **Plastic**

The scratched area will appear ivory or white in color. A magnet will NOT stick to it.



#### **Galvanized steel**

The scratched area will have a silver-gray color. A strong magnet will stick to it.



#### **Lead**

The scratched area will have a dull silver-gray color, and the metal will usually be soft and easy to scratch. A

magnet will NOT stick to it. Lead pipes are easy to bend and may be misshapen, as shown below. If you have lead pipes, we recommend replacement if at all possible.



Be sure to scratch test your pipes in multiple areas. It is not uncommon to have more than one type of piping on your water line.

#### **Do galvanized pipes contain lead?**

The galvanized pipes installed on water lines between 1880 and 1960 were dipped in molten, naturally occurring zinc. Naturally occurring zinc is impure, so these pipes were bathed in zinc that also contained lead and other impurities. The zinc coating elongated the life of the steel pipes, but added small amount of lead and other substances that could potentially harm inhabitants.

Additionally, if your galvanized pipes were ever connected to lead plumbing (including service lines) there is more cause for concern. The corrosion inside galvanized steel pipes could have trapped small pieces of the lead. Even if the lead piping was removed years ago, the galvanized steel pipes could still periodically release the trapped lead into the water flow. Most cities didn't stop using lead pipes for service lines until 1986.

The only way to ensure that lead is not mobilized from plumbing to tap in a given home is to fully replace the galvanized plumbing and any lead service lines.

#### **What other problems can galvanized pipes cause?**

- **Low Water Pressure**  
Due to the restriction of the line, corrosion in galvanized pipes can cause lower water pressure throughout your home.
- **Uneven Distribution of Water**  
If some of your taps have low water pressure, but others don't, this could be a symptom of galvanized pipes. Corrosion can build up unevenly. Also, part of the galvanized pipe line could have been replaced in your home, but not everywhere.
- **Discoloration of Water**  
Galvanized pipes can release iron and cause discoloration. A clear indicator of this is a brown stain on a porcelain sink.
- **Leaks**  
Given enough time, galvanized pipes will rust through and cause leaks and potential damage to your home or property.