

Cobb County-Marietta Water Authority and Marietta Water Overview of Lead and Copper Corrosion Prevention and Monitoring

Marietta Water purchases all of their water wholesale from Cobb County-Marietta Water Authority. The Authority treats the water and sends it to the Marietta Water distribution system to be delivered to homes and businesses in Marietta. Marietta Water works in partnership with the Authority to ensure high quality drinking water.

Sources of Lead and Copper:

The primary source of lead and copper in a drinking water system is from private plumbing systems including the service line from the meter and the piping inside homes (copper piping with solder containing lead or a lead based service line). CCMWA's water transmission system contains no lead piping or connections. Marietta Water's distribution system contains trace amounts of lead in solder on older pipes and brass fittings used at system meters. Since 2015 Marietta Water has used only lead-free brass fittings and continues to proactively replace aging pipe in our system.

Lead soldering of copper water pipes was banned in Georgia in 1985, but some homes still contain these plumbing systems. Per federal regulation, both CCMWA and Marietta Water test locations with these "at-risk" plumbing systems to ensure our corrosion control technique is effective.

Corrosion Control Techniques:

To protect water consumers from lead and copper contamination that could occur from their home plumbing systems, public water systems are required to use "optimized corrosion control" techniques under the Lead and Copper Rule. These techniques include treating the drinking water to reduce its ability to carry lead and copper from the plumbing system to the faucet.

Sample Collection, Optimization and Monitoring:

CCMWA and Marietta Water comply with the lead and copper monitoring requirements of the U.S. Environmental Protection Agency (EPA) under the Lead and Copper Rule of the Safe Drinking Water Act. We report to the Georgia Environmental Protection Division (EPD).

We conduct regular testing to tell us whether we are maintaining optimized corrosion control to prevent lead and copper from leaching out of pipes:

- Every two weeks, we test for water quality parameters at each treatment plant that indicate whether the water is corrosive of customer plumbing systems.
- Water quality testing is also conducted at 25 sample sites throughout The Authority's service area each spring and another 25 sites each fall.
- At the treatment plants, hourly samples are taken to monitor pH levels, which ensure optimization of the corrosion control strategy at all times.

Because of low levels of lead and copper historically found in the service area (and an associated low level of risk for lead and copper contamination), CCMWA and Marietta Water are required to submit samples collected at customer taps to the state only once every three years. The next round of sampling is scheduled for 2017.

What should I know about Lead in Drinking Water?

Age of the home

In Marietta the most likely source of trace amounts of lead would be from private home plumbing systems, including the service line from the meter to the home and internal plumbing. Cobb County-Marietta Water Authority's corrosion control protocol minimizes the potential for these metals to leach into drinking water.

- Homes built prior to 1970 have a greater chance of having partial lead plumbing or galvanized service lines where lead may have accumulated in the corrosion of the pipe.
- Many homes built prior to the late 1980s may have lead solder connecting copper pipes.
- Homes built after 1985 have significantly less potential for the presence of lead.
- Newer homes with brass fixtures installed before 2015 could contain minute amounts of lead.

For more information on the history of lead plumbing and regulations, visit:

<http://www.epa.gov/dwreginfo/lead-and-copper-rule#rule-history>

Identifying lead service lines

In an older home, if a portion of your plumbing is visible, you may be able to determine whether you have lead water service lines.

- Lead lines are metallic and appear light grey in color.
- They are not magnetic.
- They may be gently scratched with a key. (Be careful not to pierce the pipe.)

You can also review records for your home to see whether the plumbing has been updated and replaced since the home was built. A plumber may be able to determine if you have lead plumbing serving your home.

For more information on lead in the home, visit:

<http://www.epa.gov/lead/protect-your-family-exposures-lead#testdw>

Best practices to minimize potential exposure to lead in drinking water

There are a few best practices that can help to lessen chances of ingesting trace amounts of lead from drinking water.

- Consume only cold water directly from the faucet. Hot tap water can increase the potential for lead and other metals to leach into drinking water from the home plumbing system. (Heating cold water does not release any lead.)
- If the water has been sitting in the pipes in your home for longer than 6 hours allow the water to run a few minutes before consuming. Turn on the cold water tap and wait for the temperature to change.
- Periodically clean out the aerators (screens on the faucet). These screens can trap sediment and debris over an extended period time. They easily twist off and can be cleaned or replaced.

Getting your water tested

If you are concerned about the presence of lead in your drinking water, there are two certified labs that can test it. The test for lead ranges from \$15-\$40, depending on the number of

samples submitted. Please contact them for more information and proper sample collection protocol.

- Analytical Environmental Services
Chamblee
770-457-8177
- Analytical Services, Inc.
Norcross
770-734-4200

Resources for Flint, Michigan Lead Issues

<http://time.com/4191864/flint-water-crisis-lead-contaminated-michigan/>

<http://www.cnn.com/2016/01/18/us/flint-michigan-water-crisis-five-things/index.html>

<https://youtu.be/VyvevGHUyIQ>