

Town of Amherst
GRANDVIEW WATER FILTRATION PLANT
208 GRANDVIEW DRIVE, AMHERST, VIRGINIA 24521
PHONE: (434) 946-1267

Community Waterworks Public Education Consumer Notice

In June of 2017, the Town's Water Treatment Plant (WTP) completed water quality monitoring for Lead and Copper. At that time the WTP was on a reduced monitoring of 10 homes every three years. The results from those homes showed that a few homes that had elevated levels that exceeded the lead action level set by EPA of 0.015 mg/L. This is not a town wide problem, but rather a few homes within the town that have elevated levels. These individual sites with elevated lead level may be due to conditions unique to the home, such as copper lines with lead solder or brass faucets, fittings and valves that may contain lead. During the day/night when the water sits unused in the lines the lead will leach out into the water. To make the water in your home safe to drink, you only need to flush the cold water that has been sitting in the line.

Those with the greatest risk of lead exposure are infants, young children, pregnant women and adults who drink this water over many years. If water hasn't been used for several hours, allow the water to run at the tap for 15-30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking. This flushes lead- and copper-containing water from the pipes.

The WTP staff have been working with homeowners and the distribution system to identify what is causing the issues in these select homes.

Some of the things we have found in the individual site are as follows:

- Decrease in water used at home allowing water to sit too long in the lines
- Faucets that leach lead
- Incorrect sampling from homeowner

The corrosion inhibitor fed into distribution has been increased going to distribution system. It is designed to coat the plumbing pipes and work as a corrosion preventative. Once the corrosion inhibitor was increased, we flushed the lines in distribution to reach all areas. Operators continue collecting routine 20 lead and copper samples at the approved sites, every six months. We are tracking the water quality data throughout the distribution system to ensure that we are moving in the correct direction. Reviewing the water quality data from June 2017 to present, the homes that have exceeded lead action levels are now showing that the lead residual is dropping, with some of the homes achieving results below the lead action level.

Those homes that have plastic/ pex plumbing lines are less likely to have issues with lead exceedance, however, make sure the faucets in your home are the lead-free ones. EPA put out a sheet with the approved lead-free markings; it can be found on the EPA website. It will also be posted to the Town of Amherst website for your convenience.

We would like to thank all residents of the Town of Amherst for your patience as we work to resolve the problem. ***We are looking for more homes built between 1982-1986 with copper plumbing to become approved lead and copper sampling sites.*** Please contact Becky Cash at 434-946-1267 if you are willing to become a sampling site or have any question.

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In 1991, EPA published the Lead and Copper Rule (LCR) for the monitoring of lead and copper in public drinking waters. Lead and copper enter drinking water primarily through plumbing materials and could cause health problems. The treatment technique for the rule requires systems to monitor drinking water at customer taps. If lead concentrations exceed an action level of 0.015 mg/L or a copper concentration exceed the action level of 1.30 mg/L in more than 10% of customer taps samples, the system must undertake several actions to educate the public on steps they should take to protect their health from the hazards of lead and copper.

What is required by EPA and VDH since the Town has had an exceedance of Lead?

- The WTP now must collect Lead and Copper samples from 20 homes every six months (Jan. – June and July – Dec.)
- Once there has been 2 six-month periods that are below the Lead action level the WTP will start monitoring once a year, after 2 years of staying below the Lead action level then the WTP will go back to monitoring 10 homes every three years.

What is the Town WTP doing to correct the problem?

- WTP has increased the corrosion inhibitor that is fed into distribution system. This is designed to coat the plumbing as a corrosion preventative.
- Additional monitoring and working with customers that homes exceed Lead Action Level.
- *Seeking residents with homes built between 1982-1986 with lead and copper plumbing to be added to the approved list for lead and copper sampling sites.*
- WTP has been tracking results to look for trends throughout the distribution system. The trend currently is showing a decline in the lead results although they have not yet reached below the action level.

Important Information on How to Protect your Health from Possible Exposure to Lead and Copper.

Lead is a common metal that has been in many consumer products but is now known to be harmful to human health if ingested or inhaled. The main sources of lead exposure are lead-based paint and lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing to shoes.) Lead is rarely found in natural sources of water such as rivers, lakes, wells or springs.

Copper is a metal that occurs naturally throughout the environment in rock, soil, water, sediment and air. Since copper is easily shaped or molded, it is commonly used to make pennies, electrical wiring, waterpipes and household plumbing materials. Copper compounds are also use as agricultural pesticides and control algae in lakes and reservoirs. Copper is an essential element for all living organisms, including humans.

What are the Health Effects of Lead?

When people come in contact with lead, it may enter their bodies and accumulate over time, resulting in damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of the body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Lead in water can be a special problem for infants, whose diets may be mostly liquids, such as

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baby formulas or concentrated juices mixed with water. Smaller bodies can absorb lead more rapidly than bigger ones, so amounts of lead that won't hurt an adult can be very harmful to a child and scientists have linked the effects of lead on the brain with lowered IQ in children. During pregnancy, the child receives lead from the mother's bones, which may affect brain development. Adults who drink this water over many years could develop kidney problems or high blood pressure.

What are the Health Effects of Copper?

Excessive levels of copper can produce both short-term and long-term effects. Copper is an essential nutrient, required by the body in very small amounts. However, the EPA has found copper to potentially cause adverse health effects when people are exposed to it at levels above the action level. Children under one year of age are more sensitive to copper than adults. Short periods of exposure can cause gastrointestinal disturbance, including nausea and vomiting. Long-term exposure to copper in drinking water which exceeds the action level of 1.3 mg/L over many years has been found to cause kidney and /or liver damage. People with Wilson's Disease may be more sensitive than others to the effects of copper contamination and should consult their health care provider.

What are the Sources of Lead?

While the primary sources of lead exposure for people, and especially children is deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil. Town of Amherst Administration is more concerned with possible exposure "Through the Tap" of our water customers. When water is in contact with home water lines and fixtures or service lines that contain lead for several hours, the lead may enter drinking water. Homes built before June 1986 are more likely to have plumbing containing lead. Lead pipes are no longer installed for service lines or in household plumbing and lead solder has been outlawed in Virginia since 1985.

New brass faucets, fittings, and valves, including those advertised as "lead-free", may contribute lead to drinking water. The Safe Drinking Water Act defines "lead-free" as no more than 0.2 percent lead when used with respect to solder and flux: and no more than a weighted average of 0.25 percent lead when used with respect to the wetted surface of pipes, pipe fittings, plumbing fittings, and fixtures. Consumers should be aware of this when choosing fixtures and take appropriate precautions.

Steps You Can Take to Reduce Your Exposure to Lead in Your Water:

1. **Identify if your home has lead/copper plumbing.** New and possibly remodeled homes will not have metal water lines.
2. **Identify if your plumbing fixtures contain lead.** New brass faucets, fittings and valves, including those advertised as "lead-free," may contribute lead to drinking water.
3. **Run your water to flush out the line.** Run water for 15-30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes any possible lead-containing water from the pipes.
4. **Use cold water for cooking and preparing baby formula.** Do not cook with or drink water from the hot water tap; lead would dissolve more easily into hot water. Do not use water from the hot water tap to make baby formula.
5. **Do not boil water to remove lead.** Boiling water will not reduce lead.
6. **Look for alternative sources or treatment of water.** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact

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NSF International at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.

- 7. *Get your child tested.*** Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.

Addition Lead information from the Environmental Protection Agency website found at:
<https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#getinto>

How Lead Gets into Drinking Water

Lead can enter drinking water when service pipes that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. The most common problem is with brass or chrome-plated brass faucets and fixtures with lead solder, from which significant amounts of lead can enter into the water, especially hot water.

Homes built before 1986 are more likely to have lead pipes, fixtures and solder. The Safe Drinking Water Act (SDWA) has reduced the maximum allowable lead content -- that is, content that is considered "lead-free" -- to be a weighted average of 0.25 percent calculated across the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures and 0.2 percent for solder and flux.

- [Learn more about the maximum allowable content of lead in pipes, solder, fittings and fixtures](#)
- [Learn more about EPA's regulations to prevent lead in drinking water](#)
- [Learn how to identify lead-free certification marks on drinking water system and plumbing products \(PDF\)](#)

Corrosion is a dissolving or wearing away of metal caused by a chemical reaction between water and your plumbing. A number of factors are involved in the extent to which lead enters the water, including:

- the chemistry of the water (acidity and alkalinity) and the types and amounts of minerals in the water,
- the amount of lead it comes into contact with,
- the temperature of the water,
- the amount of wear in the pipes,
- how long the water stays in pipes, and
- the presence of protective scales or coatings inside the plumbing materials.

To address corrosion of lead and copper into drinking water, EPA issued the [Lead and Copper Rule \(LCR\)](#) under the authority of the SDWA. One requirement of the LCR is corrosion control treatment to prevent lead and copper from contaminating drinking water. Corrosion control treatment means utilities must make drinking water less corrosive to the materials it comes into contact with on its way to consumers' taps. [Learn more about EPA's regulations to prevent lead in drinking water.](#)

Reduce Your Exposure to Lead in Drinking Water at Home

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- Use only cold water for drinking, cooking and making baby formula. Boiling water does not remove lead from water.
- Regularly clean your faucet's screen (also known as an aerator).
- Consider using a water filter certified to remove lead and know when it's time to replace the filter.
- Before drinking, flush your pipes by running your tap, taking a shower, doing laundry or a load of dishes.

Drinking Water

Lead can enter drinking water through corrosion of plumbing materials, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. Homes built before 1986 are more likely to have lead pipes, fixtures and solder. However, new homes are also at risk: even legally "lead-free" plumbing may contain up to eight percent lead.

Beginning January 2014, changes to the Safe Drinking Water Act further reduced the maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures to 0.25 percent. The most common problem is with brass or chrome-plated brass faucets and fixtures with lead solder, from which significant amounts of lead can enter into the water, especially hot water.

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- [Get more basic information about lead in drinking water.](#)
- [Get information on your local drinking water system's water quality for lead through your drinking water quality report \(called a Consumer Confidence Report\).](#)
- [Test your home's drinking water.](#)