

Greenville Utilities

Lead and Drinking Water Fact Sheet

What Is Lead?

- ◆ Lead is a common, naturally occurring metal found throughout the environment. Lead has many uses. It is used to make batteries and many other products.

Why Is Lead Regulated?

- ◆ Although it has been used in many consumer products, lead is a toxic metal known to be harmful to human health if inhaled or ingested in sufficient amounts.
- ◆ Lead can pose a risk to your health if too much of it enters the body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys.
- ◆ The greatest risk is to young children, pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies.

How Am I Exposed to Lead?

- ◆ Most cases of lead poisoning are from contact with peeling lead paint and lead paint dust. Other sources include soil, fishing weights, ammunition, household dust, pewter, cable coverings, tap water, caulk, bearings, pottery, folk medicine remedies or cosmetics which many contain lead, and some occupations and hobbies.
- ◆ While lead in tap water is rarely the single cause of lead poisoning, it can increase a person's total lead exposure, particularly in infants who drink baby formula or concentrated juices that are mixed with water. The Environmental Protection Agency (EPA) estimates that water can make up to 20% of a person's total exposure to lead.

How Could Lead Get into my Drinking Water?

- Lead is unusual in that it seldom occurs naturally in water supplies like rivers and lakes. Typically, lead gets into your water through household plumbing, AFTER the water leaves the local treatment plant.

It is important to know that the water supplied to GUC customers has no detectable levels of lead present when it leaves our Water Treatment Plant.

- ◆ The common sources of lead in drinking water are as follows:
 - **Lead-based solder used to join copper pipe**
 - ◆ The source of lead in your home's water is most likely pipe or solder in your home's own plumbing. The most common cause is **corrosion** (wearing away), a reaction between the water and copper pipes with lead solder.
 - **Faucets made of brass and chrome-plated brass**
 - ◆ Brass fixtures may contain lead. Household faucets may be another source of contamination. Chrome-plated faucets are generally made of brass, which contains 3 to 8 percent lead.
 - **Pipes made of lead that connect a home to the water main.**
 - ◆ GUC owns and operates 580 miles of water lines. None of these lines is made of lead. Greenville Utilities' service lines and distribution lines that carry water to our customers' homes are made mostly of plastic and iron and do not add lead to your water. We have never used lead service lines.

About the Regulations

- The U.S. Environmental Protection Agency (EPA) implemented the Lead and Copper Rule in 1991 under authority granted by the Safe Drinking Water Act. The Rule is unique in that it requires water systems to collect samples at the customer's tap (rather than from the distribution system) to determine compliance
- The Rule establishes a "worst case" set of sampling criteria.
 - ◆ Samples can only be collected from a pre-approved list of houses built between 1983 and 1988. Houses built in that time frame are considered to be at a higher risk for lead to be present in the water due to leaching of lead solder from home plumbing.
 - ◆ Samples must also be collected from the tap after the water has not been used for six hours. The longer the water is in contact with the lead solder in the home plumbing, the greater the potential for lead to be present in the water.

* The samples are taken by volunteer homeowners, collected by GUC staff and analyzed by an independent certified laboratory.

- Regulations require that no more than 10% of the tap samples collected can exceed the EPA “Action Level” of 15 parts per billion (ppb) for lead. To put that amount into perspective 15 parts per billion equals 15 seconds in 32 years or 15 cents in \$10 million dollars.
 - ◆ If more than 10% of the homes sampled have lead levels greater than 15 ppb, then the Action Level has been exceeded and we must take certain steps to ensure our treatment process has been optimized. (An Action Level is not a violation of water quality standards; rather it is a “trigger” to take further action.)

What Can You Do to Reduce Your Exposure to Lead?

You can reduce lead levels by taking the following precautions:

- **Run water through your tap before consuming:** After water has been sitting in the pipes for more than six (6) hours (usually in the morning), run your cold water for two to four minutes before using it to drink or prepare food. During the day, run the water for a minute before consuming the water. *Boiling your water will not reduce the amount of lead in your water.*
- **Use only cold water for cooking and drinking:** Hot water can dissolve more lead more quickly than cold water. If you need hot water, heat cold water on the stove.
- **Remove and clean strainers from your faucets/spigots several times a year.**
- **Have your water tested:** The only way to be sure of the amount of lead in your household water is to have it tested by a competent laboratory. You can have your water tested at no charge through Greenville Utilities. Contact the Water Treatment Plant at 551-1563.

You can also contact one of the following State-approved laboratories directly:
Environment One: (252) 756-6208; Oxford Lab: (252) 763-9793; Southern Testing: (252) 237-4175. The average price of lead test is \$20.

For Additional Information

- GUC’s Water Resources at (252) 551-1551 can provide you with additional information about our water supply.

For General Information on Lead:

- EPA Safe Drinking Water Hotline 1-800-426-4791
- EPA Water Website at www.epa.gov/safewater/lead

- National Lead Information Center at 1-800-424-LEAD or at www.epa.gov/lead

For Health Issues Concerning Lead:

- The North Carolina State Department of Health and Human Services at (919) 733-4261 or Dr. John Morrow at the Pitt County Health Center at (252) 902-2300 can provide you with information about the health effects of lead and how you can have your child's blood tested; and
- The United States Environmental Protection Agency operates a National Lead Information Center at 1-800-424-LEAD or can be reached at its website www.epa.gov/lead/.
- Center for Disease Control: Website at www.cdc.gov/nceh/lead/lead
- AmericanWater Works Association: Website at www.awwa.org/advocacy/pressroom/Lead
- Association of Metropolitan Water Agencies: Website at www.amwa.net/lead/index
- North Carolina Division of Environmental Health: Fred Hill, Regional Engineer, (252) 946-6481