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LEAD AND COPPER RULE

FREQUENTLY ASKED QUESTIONS

Prepared for:

City of San Angelo

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1.1 HOW DOES LEAD END UP IN DRINKING WATER?

Lead does not come from the raw water source that supplies your residence. The City routinely monitors for lead at the water supply and historical results show no lead detected in the water supply entering the system.

When lead is present in a water supply, it most commonly comes from lead piping or plumbing materials that are in contact with the water. Contact occurs within the pipes that bring water from the plant to the building and the plumbing materials within the building. The City has no record of the presence of lead in the City water system's piping; however, we do not maintain records of private plumbing.

While the water source that feeds your home does not contain lead, if lead exists in the plumbing, the source water's temperature, pH level, and mineral content can potentially worsen lead leaching from pipes, fixtures, and solder into the drinking water (EPA, 2024). The City follows all safe drinking water requirements to monitor water chemistry and lead results within customer homes to ensure the drinking water is safe.

1.2 HOW IS DRINKING WATER TESTED FOR LEAD CONTAMINATION?

The City regularly monitors drinking water for lead, as the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) require. Samples are collected from various homes within the community, focusing on those most likely to have higher lead levels. Samples are collected from inside faucets that are most frequently used for consumption, such as kitchen or bathroom sinks. The water is analyzed in certified laboratories to measure the concentration of lead.

The City reports these findings to the state and the public. The City's lead monitoring results have historically met state and federal safe drinking water requirements.

1.3 WHAT ARE OTHER SOURCES OF LEAD EXPOSURE?

Lead exposure can occur through paint, industrial emissions, soil contaminated by past emissions or leaded gas, and certain imported products or foods.

2.0 QUESTIONS RELATED TO ROUTINE LEAD SAMPLING

2.1 WHY WAS MY HOME CHOSEN FOR LEAD SAMPLING?

The EPA and the TCEQ require cities to identify homes with known lead or having a higher likelihood of lead plumbing or solder installed based on the construction year before the lead ban. These homes are ranked based on various criteria, such as those with known lead plumbing or lead solder or with a higher chance of lead materials based on construction year. From this pool of high-likelihood homes, a representative sample is selected for lead testing.

It is important to note that being chosen for lead sampling does not necessarily mean that your home contains lead. If your home has lead service lines, you will be informed about it in annual letters starting in November 2024.

2.2 HOW IS SAMPLING PERFORMED?

The resident is provided a sample kit with instructions on how to collect a water sample. The water sample is required to be 1 liter and to be taken at a tap that has not been used in 6 hours; see the images below:

The City arranges to pick up the sample and send it to a laboratory for analysis. The results of the analysis are provided to the resident and the TCEQ. You may contact the City at 325-226-0785 or elena.velez-reyes@cosatx.com to confirm that a City employee or authorized contractor provided the sample kit. Authorized personnel will NOT request to enter a resident's home and will NOT request any payment; the sampling should be done at no cost to the homeowner.

2.3 WHAT CAN I DO IF MY HOUSE IS NOT CHOSEN FOR LEAD SAMPLING?

To be chosen for lead sampling, your house must be lead-containing or potentially lead-containing. As service lines are replaced, sample sites will be chosen based on representation throughout the community.

2.4 LEAD WAS DETECTED IN MY DRINKING WATER; WHAT DO I DO NEXT?

If lead is detected in your drinking water, immediately reduce your exposure. Run the water tap for 2 -5 minutes before use. Use bottled water or a filter, such as a Brita filter, to remove lead for drinking and cooking. Boiling water does NOT reduce the level of lead in your water.

For more details, please refer to the question "What can I do to reduce my exposure to lead?" or visit the CDC's website: https://www.cdc.gov/lead-prevention/prevention/drinking-water.html

2.5 IS THERE A SAFE LEVEL OF LEAD CONCENTRATION IN DRINKING WATER?

According to the Environmental Protection Agency (EPA), no lead in drinking water is considered safe, especially for vulnerable populations such as children and pregnant women (EPA, 2017). The EPA has set the action level for lead in drinking water at 15 parts per billion (ppb). Still, the goal is to reduce lead concentrations to as low as reasonably possible because any exposure to lead is potentially harmful.

3.0 QUESTIONS RELATED TO LEAD SERVICE LINES AND PLUMBING

3.1 WHAT IS THE SERVICE LINE, AND WHO OWNS IT?

A service line is a pipe that conveys water between the water main located under the street into individual homes and buildings. The City owns the water main and service lines from the water main to the meter, and the property owner owns the service lines from the meter into the building, as shown in the figure below.

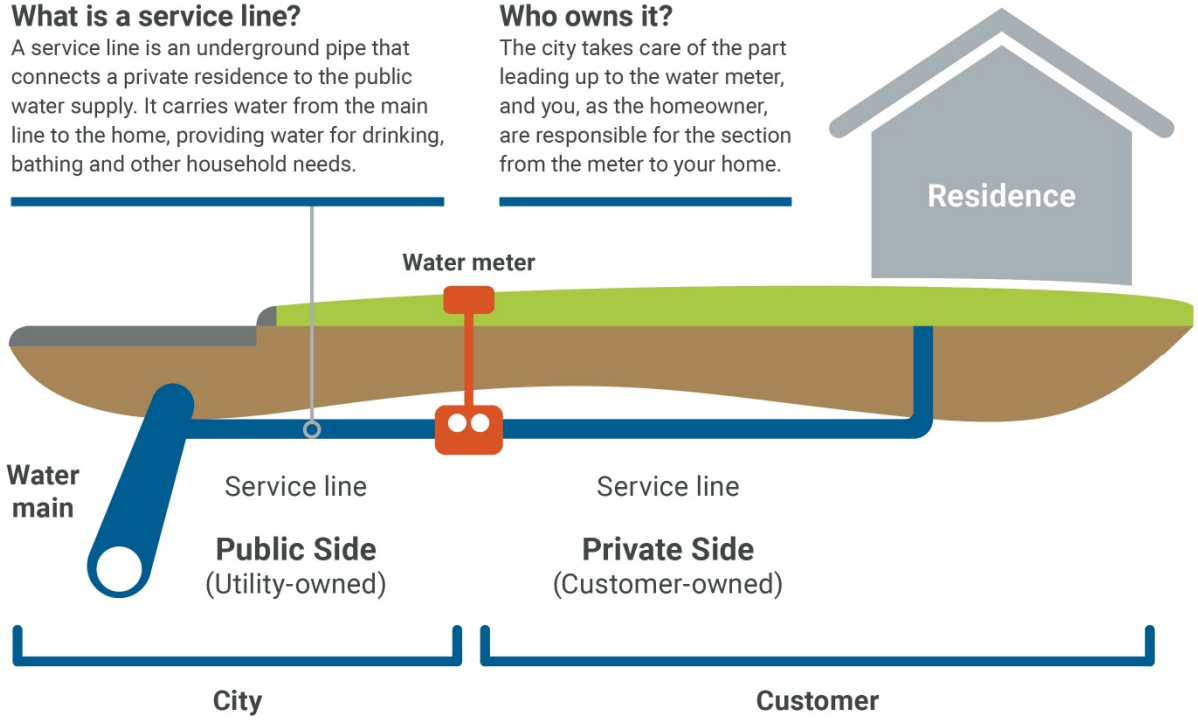

Figure 3-1: Example of Service Line and Ownership

3.2 WHAT IS THE NEW REGULATION REGARDING LEAD IN DRINKING WATER?

Lead is regulated in drinking water through the Lead and Copper Rule. The EPA and the TCEQ released updated standards to protect communities from lead exposure in drinking water. These new standards, the 'Lead and Copper Rule Revisions' and 'Lead and Copper Rule Improvements,' mandate that all drinking water utilities in the United States, including Texas, must investigate whether lead service lines are present in their water distribution systems and plan for service line replacements. The new rules also

update requirements for water sampling and response actions utilities must take if testing shows lead in their water. Please refer to the EPA Lead and Copper Fact Sheet for more information.

While the same rule regulates copper, it does not carry the same health risk as lead and is not a focus of the new rule. The sole purpose of this new regulation is to protect communities from the likelihood of lead exposure from drinking water flowing through lead pipes. The City has no record of lead pipes and is in the process of inspecting service lines to verify the line material for connections built before the federal lead ban.

3.3 HOW DO I FIND OUT IF MY HOME HAS LEAD LINES?

First, locate your plumbing lines. They can usually be seen at the pipe entering the water heater, attic, basement, or other utility areas where pipes are exposed. A certified plumber can help perform an inspection to locate plumbing lines and identify the material. Your service line, which connects your home to the water meter, is buried and will require excavation to expose a portion of the line.

Lead is a dull, soft, non-magnetic material that turns a shiny silver when scratched. A scratch test is a quick method for identifying the service line material entering a home or building. If the scratched area turns out to be roughly the color of a penny, it is likely copper. But if it turns shiny silver, it may be lead or galvanized iron. You can place a magnet on the pipe to distinguish between lead and galvanized iron. If the magnet sticks to the pipe, it is likely iron and not lead. Once you've identified the material of your premise's plumbing and/or service line, please inform your local utility.

Example of Copper Pipe

Example of Lead Pipe

Example of Galvanized Pipe

Figure 3-2: Examples of Copper Pipe, Lead Pipe, and Galvanized Pipe

4.0 QUESTIONS RELATED TO REDUCING LEAD EXPOSURE

4.1 WHAT CAN I DO TO REDUCE MY EXPOSURE TO LEAD?

DO:

- Run your faucet to ensure that the water that comes out is not stagnant. If it hasn't been used for several hours, run the water for three to five minutes {or longer if appropriate given construction practices in the communities served, make sure to check local guidelines to reference flushing protocols.} to clear the water that sat stagnant in the line. (To conserve water, consider catching the flushed tap water for plants or other household use, such as mopping floors.) (TCEQ, 2014)
- Always use cold water for drinking, cooking, and preparing baby formula. Never cook with or drink water from the hot water tap, and never use water from the hot water tap to make formula. (TCEQ, 2014)
- Periodically remove and clean the faucet screen/aerator. While removed, run the water to eliminate debris. (TCEQ, 2014)
- Identify and replace plumbing fixtures containing lead. Brass faucets, fittings, and valves may leach lead into drinking water. All brass plumbing fixtures purchased before 2014 should be replaced. Products purchased after that date meet lead-free requirements. (TCEQ, 2014)
- Have a licensed electrician check your wiring. Your home electrical system may be attached to your service line or elsewhere in your plumbing. If this connection is electrified, it can accelerate corrosion. Check with a licensed electrician to correct ground faults and evaluate your local electric code to determine if your wiring can be grounded elsewhere. (TCEQ, 2014)
- Consider investing in a home water treatment device or alternative water source. When purchasing a water treatment device, ensure it is certified under NSF/ANSI 53 to remove lead. Search for certified products at NSF International or Water Quality Association.
- NSF - https://www.nsf.org/certified-products-systems

Figure 4-1: NSF Certification Symbol

Water Quality Association - https://find.wqa.org/find-products#/

Figure 4-2: WQA Certification Symbol

DO NOT:

- Do not boil water to remove the lead. Boiling water will not reduce lead. (TCEQ, 2014)
- Do not attempt to change electrical wiring yourself. Improper bonding or grounding can cause electrical shock and fire hazards. (TCEQ, 2014)

5.0 QUESTIONS RELATED TO SERVICE LINE LETTERS

5.1 I RECEIVED A LETTER STATING I HAVE A GALVANIZED SERVICE LINE. DO I NEED TO REPLACE IT?

The City will replace all the public-owned portions of the service line (water main to the meter) by 2037. While you are not required to replace your service line's private side (from the water meter to your residence), it is highly recommended. The Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) emphasize that there is no safe level of lead exposure and advise against partial lead service line replacement. Lead pipes can corrode, releasing lead particles into the water supply. Galvanized pipes that have ever been downstream of any lead pipe can adsorb and release lead into the drinking water.

6.0 REFERENCES

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