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LEAD AND COPPER RULE

FREQUENTLY ASKED QUESTIONS

Prepared for:

City of Kennedale

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1.1 WHAT IS LEAD?

Lead is a naturally occurring metal that can be harmful if inhaled or swallowed. It can be found in air, soil, dust, food, and water. (TCEQ, 2023)

1.2 HOW DOES LEAD END UP IN DRINKING WATER?

The presence of lead in drinking water can come from three sources: lead service lines to a building, lead solder commonly used to join copper or cast iron pipes, or lead pipes, plumbing fittings, and fixtures within a building. Service lines are pipes that connect homes to water mains. Lead does not come from the surface water source that supplies your residence. However, the source water's temperature, pH level, and mineral content can potentially exacerbate lead leaching from pipes, fixtures, and solder into drinking water. (EPA, 2024)

Lead solder was commonly used to join copper pipes until 1988, when regulations limited its use. In older communities, the service lines may be made of lead. Corrosion of these service lines can release lead into the water supply.

1.3 IS MY HOME LIKELY TO HAVE LEAD PLUMBING?

The national lead ban was enacted in Texas in 1988, so plumbing installed before 1989 is at risk of containing lead in the lines, solder, or fixtures. You can check the recorded material of your service line by entering your address into our interactive Service Line Material Web Map https://experience.arcgis.com/experience/57b6f7b7a97d4a31aca3ea8f8f88352a. If you think your home's service line material has been mistakenly classified, please report the issue to Kristian Sugrim by submitting an email to ksugrim@cityofkennedale.com

1.4 WHAT IF THE CITY DOESN'T SUPPLY WATER TO MY PROPERTY, AND I HAVE ANOTHER LOCAL WATER SOURCE? AM I STILL AT RISK OF BEING EXPOSED TO LEAD?

If your property does not use City water and relies on a well or another local source, the risk of lead contamination still exists. Lead contamination can come from the well components, the pump, and the pipes leading into your home, especially if they are made of or soldered with lead.

1.5 WHAT IF I LIVE IN AN APARTMENT COMPLEX? AM I STILL AT RISK OF BEING EXPOSED TO LEAD?

Living in an apartment complex does not exempt you from the risk of lead exposure. If the building is older and does not have updated plumbing, lead pipes or solder might be present. Furthermore, the complexity of plumbing systems in large buildings can make it difficult to control water quality.

1.6 HOW IS DRINKING WATER TESTED FOR LEAD CONTAMINATION?

The Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) mandate regular sampling to test drinking water for lead. 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. These samples are analyzed in certified laboratories to measure the concentration of lead. Utilities must report these findings to the state and the public. Kennedale's P90 monitoring results have historically met state and federal safe drinking water levels for lead and have never been detected above 15 ug/L: the action level standard for lead in drinking water. P90 or 90th percentile value means that 90% of the samples taken over the year have lead levels at or below this value. Essentially, it indicates that only 10% of the samples had lead levels higher than this threshold, making it a benchmark for assessing overall water quality.

1.7 AT WHAT LEVEL DOES LEAD-CONTAMINATED WATER NEED TO BE REPORTED?

If the P90 lead concentration exceeds the TCEQ's action level of 15 parts per billion (ppb), the utility must notify the public and take corrective actions to reduce the lead levels (EPA, 2024). For reference, 15 ppb is equivalent to dissolving a drop of dye into a large swimming pool. Kennedale's historical P90 results have no readings detected over 15 ppb.

1.8 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 with a higher risk of lead plumbing or solder because they were constructed prior to 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-risk 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?

A sample kit with instructions will be provided to the resident to collect a water sample. The water sample must be 1 liter (see image below) and must be taken at a tap that has not been used within 6 hours.

The City will arrange to pick up the sample and send it to a laboratory for analysis. Analysis results will be provided to the resident and the TCEQ. You may contact the City 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 type of payment. The sampling will be done at no cost to the resident.

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. Residents can also request a one-time sample to be arranged by the City.

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. Use bottled water or a filter, such as a Brita® Water Pitcher or Filter, to remove lead for drinking and cooking. Boiling water does NOT reduce the level of lead in your water. Keep informed with our lead replacement progress on the City's website: Kennedale, TX - Official Website | Official Website (cityofkennedale.com)

If you have any further questions, please visit the CDC's website:

https://www.cdc.gov/nceh/lead/faqs/lead-faqs.htm

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 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 INSPECTIONS

3.1 WHY IS THE CITY CONDUCTING SERVICE LINE INSPECTIONS?

These inspections are being completed to comply with a new state and federal regulation that requires all drinking water utilities in the United States, including in the state of Texas, to investigate and determine the material of the service lines in their water systems. Not all service lines will be inspected, and an inspection is not required for locations with documentation of service line material.

3.2 IS DIGGING REQUIRED FOR INSPECTIONS?

Inspections will most likely be conducted at the meter box and will not require digging in your yard. If digging is the only alternative to confirm the service line material, the City will promptly notify the resident. No digging will occur on private property without permission from the resident.

3.3 DO I NEED TO BE HOME OR PRESENT FOR THE INSPECTION, AND DO I NEED TO KNOW WHEN THE INSPECTORS ARE COMING?

No. Crews will be working at the property's meter box. Crews do not need to interact with residents, nor will they need to enter your home or disrupt water service to your house.

3.4 WHAT TYPE(S) OF TEST(S) WILL BE PERFORMED DURING THE SERVICE LINE INSPECTION?

Crews will conduct a visual inspection to confirm the service line's material. Additional tests may be conducted to identify metallic metal plumbing materials further. These tests include scratch or magnet tests and lead swab kits, per the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) guidelines. (EPA, 2023)

4.0 QUESTIONS RELATED TO LEAD SERVICE LINES AND PLUMBING

4.1 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.

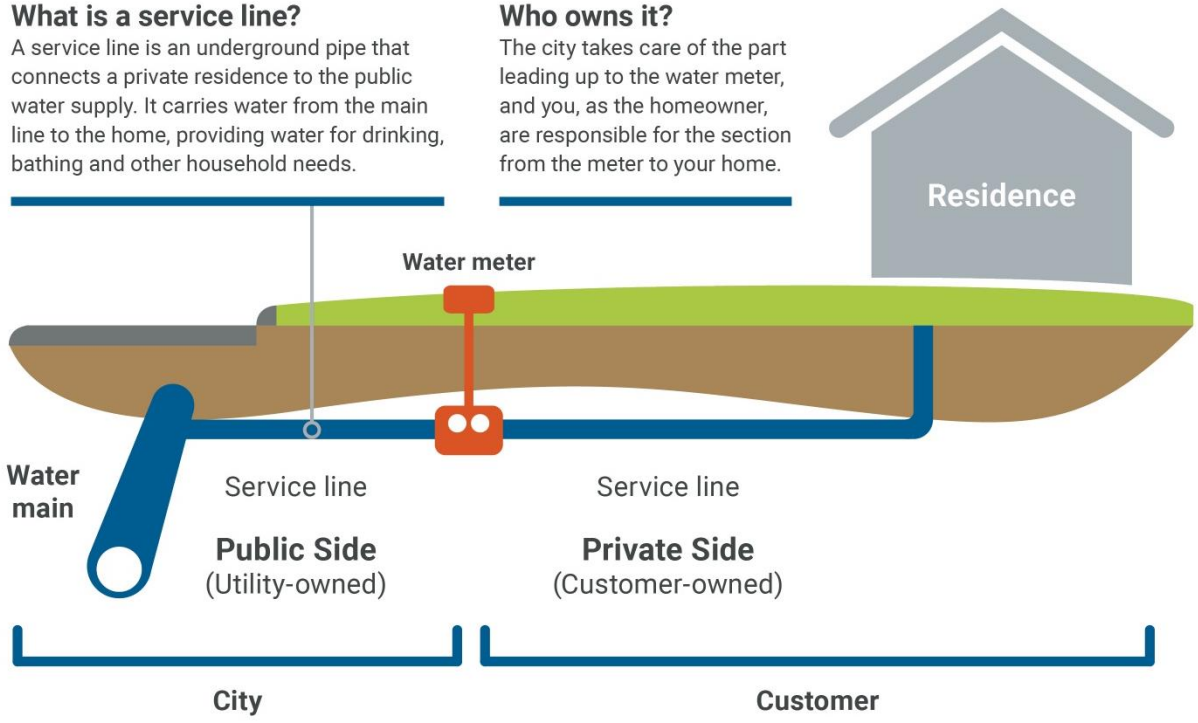

Figure 4-1: Example of Service Line and Ownership

4.2 WHAT IS THE NEW REGULATION FOR LEAD SERVICE LINES?

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, copper 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 risks of lead exposure from drinking water flowing through lead pipes. The City has no record of lead pipes and has performed inspections to verify the service line material for connections built before the federal lead ban.

4.3 IF CREWS FIND A LEAD SERVICE LINE, WHO WILL FIX IT?

The City is committed to replacing the publicly owned portion of lead service lines in our water system as part of its Lead Service Line Replacement plan. If crews discover a lead service line, the City will take responsibility for replacing the City-owned portion of the service line from the main to the meter.

Our goal is to remove all potential lead sources from the City's lines. We encourage customers to find out if lead exists on privately owned lines, plumbing fixtures, or solder and encourage replacement of any existing lead that is found. Currently, the City does not have the ability to pay for line replacement on the customer side. The City will continue to follow federal and state requirements and guidance and will update residents with known lead if funding becomes available for replacements on the private side.

4.4 IF LEAD IS FOUND IN THE SERVICE LINE, DOES THAT MEAN THERE IS LEAD IN MY WATER?

No, just because a service line contains lead, this does not mean lead is in the drinking water. The City will conduct water monitoring at locations where lead lines are found and test for lead in the water inside the home. The City currently conducts routine water monitoring for lead, and historical results show that lead levels meet safe drinking water standards.

4.5 IF I REPLACE THE SERVICE LINE, WILL I BE REIMBURSED?

Unfortunately, no. The property owner is responsible for the private side of the service line. However, if you inform Kennedale's Department of Public Works in advance that you plan to replace the private side of the service line, the City will prioritize replacing the public side of your service line. Please contact Kristian Sugrim by submitting an email to ksugrim@cityofkennedale.com

4.6 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 4-2: Examples of Copper Pipe, Lead Pipe, and Galvanized Pipe

4.7 WHERE CAN I FIND TEST KITS OR LEAD SWABS TO IDENTIFY SERVICE LINE MATERIALS FEEDING WATER TO MY PROPERTY? (AUTHORIZED VENDORS OF ENTITIES)

Scratch and magnet tests are considered the most reliable tests. Lead test kits should only be used to verify your findings. They can be purchased from many hardware stores or online retailers.

4.8 WHAT IF I LIVE IN AN APARTMENT COMPLEX?

It is the landlord's responsibility to maintain pipes. If you are concerned about the material of the pipes, you can ask your landlord if they can perform a scratch test or have a plumber verify your line materials.

5.0 QUESTIONS RELATED TO REDUCING LEAD EXPOSURE

5.1 CAN WATER FILTERS REMOVE LEAD?

Filters certified under NSF/ANSI Standard 53 for total lead removal, NSF/ANSI Standard 58 for reverse osmosis, and NSF/ANSI Standard 42 for fine particulates (Class I) effectively reduce lead in drinking water. Always follow the manufacturer's instructions for installation and maintenance to ensure the filter's effectiveness. Contact NSF International at 800-NSF-8010 or visit www.nsf.org for information on performance standards for water filters.

5.2 DOES BOILING WATER MAKE IT FREE OF LEAD OR SAFE FOR CONSUMPTION?

It is a common misconception that boiling water can remove lead, but it does not (TCEQ, 2014). Boiling water can increase the lead concentration since it causes some of the water to evaporate while the lead remains. The most effective way to reduce the risk of lead exposure from drinking water is to use a certified water filter to remove lead or to opt for bottled water for drinking and cooking.

5.3 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 has 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 the screen/aerator is 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 5-1: NSF Certification Symbol

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

Figure 5-2: WQA Certification Symbol

DO NOT:

- Do not boil water to remove 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)

6.0 QUESTIONS RELATED TO HEALTH

6.1 IS IT SAFE TO USE WATER CONTAMINATED WITH LEAD FOR PURPOSES OTHER THAN COOKING AND DRINKING, SUCH AS SHOWERING, LAUNDRY, AND IRRIGATION?

While lead-contaminated water can pose a risk if ingested, it is generally safe for other household uses such as showering, laundry, and irrigation. Lead does not easily penetrate the skin and isn't readily absorbed during typical household activities. However, it's crucial to avoid using contaminated water for preparing baby formula or any other use where it might be ingested, especially by children or pregnant women. It's important to prioritize actions to reduce or eliminate lead from your water supply to ensure overall safety.

6.2 IS THE CITY WATER SOURCE SAFE FOR CONSUMPTION?

Yes, the source water obtained from the City water distribution system is safe to drink. Our Public Water System (PWS) meets all water standards the TCEQ sets. The City's water sources, City of Fort Worth and City of Arlington, have been rated "Superior" for excellence by the Texas Commission on Environmental Quality (TCEQ).

6.3 WHAT ARE THE HEALTH ISSUES CAUSED BY LEAD EXPOSURE?

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant women, infants (both formula-fed and breastfed), and young children. Some health effects on infants and children include decreased IQ and decreased attention span.

Lead exposure can also result in new or worsened learning and behavior problems. The children of women who were exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your healthcare provider for more information about your risks.

6.4 CAN LEAD BE HARMFUL TO MY PETS?

Yes, lead contamination also affects animal health. Follow the same protocol listed above to reduce potential pet lead exposure.

7.0 QUESTIONS RELATED TO SERVICE LINE LETTERS

7.1 WHY DID I RECEIVE A LETTER ABOUT MY SERVICE LINE MATERIAL?

The City developed an inventory of its service lines. Based on this inventory, the City was able to identify lines containing lead and lines containing unknown material that could potentially be lead because the homes these lines service were constructed before the lead ban in 1988. Residents with these service lines received letters and will be receiving them annually.

7.2 WHAT DO I NEED TO DO TO CHANGE MY SERVICE LINE?

If you want to replace the privately owned portion of the line, you will need to contact a plumber and cover the replacement costs. If the city side of the line also requires replacement, contact the City to coordinate replacement activities.

7.3 I RECEIVED A LETTER STATING I HAVE A LEAD (OR GALVANIZED) SERVICE LINE. DO I NEED TO REPLACE IT?

The City will replace all the publicly owned portions of service lines (water main to the meter) by 2037. While you are not required to replace your service line's private side (from the water meter up 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 are downstream of any lead pipe can absorb and release lead into the drinking water.

8.0 REFERENCES

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(2) U.S. Environmental Protection Agency. (2024). Basic information about lead in drinking water. Retrieved from https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#getinto

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