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Please help us protect your health.

The U.S. Environmental Protection Agency (EPA) recently issued regulations requiring all public water supply (PWS) systems to develop a Lead Service Line Inventory (LSLI) of both water system owned and your privately owned service lines. Your PWS system must submit this inventory to the Kansas Department of Health and Environment (KDHE) by October 16, 2024.

Representatives of your water system may contact you in the near future to ask you to answer some questions such as the date your home was built or if you know what materials were used in your home's plumbing and service line, among other questions. Please take the time to respond to their inquiries as this will help determine if you or your family have a lead exposure risk. If you are unsure, your water system should be able to help identify materials. The goal is to remove all lead containing service lines to your home.

Piping containing lead can become a potential health risk in drinking water. Some homes (typically built before 1988 in Kansas) may have lead service lines on the customer's property that connect to your water system's main lines. On the back of this letter is a schematic of where lead sources in drinking water may be found.

Young children, infants, and fetuses are particularly vulnerable to lead in drinking water and water used for formula because the physical and behavioral effects of lead occur at lower exposure levels in children than in adults.

Additional information on the Lead and Copper Rule and identifying lead pipes and plumbing can be found on the KDHE website at: kdhe.ks.gov/547/

Or at the EPA Website at: epa.gov/dwreginfo/lead-and-copper-rule

Kansans working together will get the lead out of our water systems.

Thank you for your cooperation,

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By Rob Gavin, P.G., Compliance and Data Management Unit Chief
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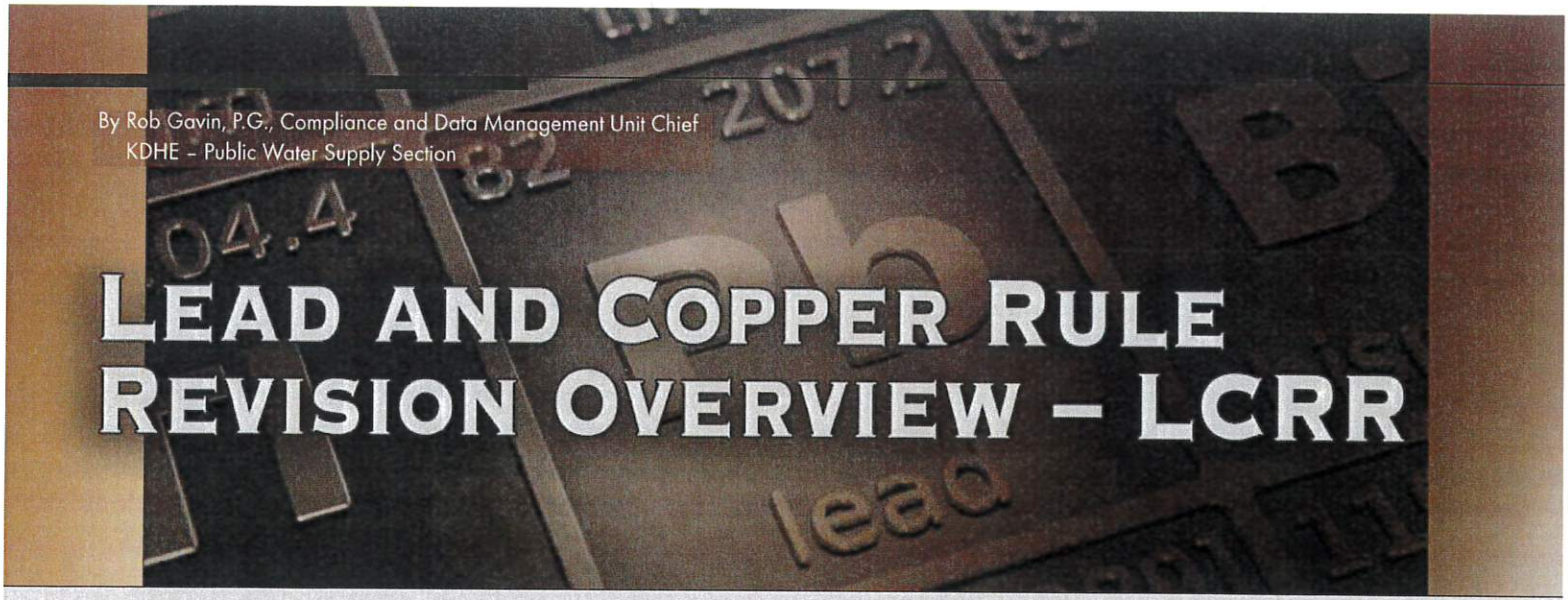

Lead and Copper Rule Revision Overview – LCRR

To improve public health protection, the US Environmental Protection Agency (EPA) has revised the 1991 Lead and Copper Rule under the Safe Drinking Water Act. The new Lead and Copper Rule Revisions (LCRR) became effective December 16, 2021. The goal of the new Rule is to identify and then remove all the lead in drinking water from the source to the drinking water glass. EPA received over 78,000 comments from state regulators, water systems, industry groups, environmental advocacy groups, and the public on issues with the new Rule. However, the Rule was enacted as originally written. It is expected that EPA will address comments and make some changes when the Lead and Copper Rule Improvements Rule (LCRI) is published in the fall of 2023. EPA indicated they did not want to delay water systems from completing the required service line inventories contained in the Rule. EPA recommends that all systems should now concentrate on completing their lead Service Line Inventory as other details of the Rule may change.

There is a substantial amount of work involved for both water systems and state agencies to comply with the new LCRR. Each water system is now required by EPA to develop an inventory of all service lines, including water system-side and private-side materials. The inventory must be submitted to the Kansas Department of Health and Environment (KDHE) prior to October 16, 2024.

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KDHE is requiring that all systems use the Kansas Lead Service Line Inventory Spreadsheet for reporting their inventories. The following service line designations must be used for the service line inventory; "Lead" Service lines, "Lead Status Unknown" Service Lines will be considered as Lead, "Galvanized lines requiring replacement" – Lines Previously downstream of lead or if "unknown" and "Non-lead" service lines that water system has evidence, or record that service line is non-lead. EPA and KDHE understand that many service lines, especially the private-side will be unknown initially, systems should work to identify as many as possible due to "lead status unknown" materials being classified as lead service lines (LSLs) in the new Rule and subject to replacement requirements.

The definition of a "lead service line" has also changed to include any galvanized pipe service lines that has ever been downstream of a lead service line. This is maybe the most contentious portion of the Rule as it is stated both galvanized lines downstream of lead connectors (goosenecks and pigtails) and lead lines are considered "Galvanized Requiring Replacement" (GRR). Yet, in another portion of the Rule, galvanized downstream of connectors are not considered GRR. EPA is expected to clarify this discrepancy in the 2023 rule improvements. KDHE is requiring lead connectors to be inventoried to cover both scenarios. The Rule requires water system to make their inventory publicly available. Systems with over 50,000 population also must make the inventory available online. Instructions on how to access the inventory will be required to be included in the system's Consumer Confidence Report (CCR).

This Kansas Lead Service Line Inventory Spreadsheet is currently available on the KDHE website at: https://www.kdhe.ks.gov/547/Lead-Copper-Rule

The Rule also creates a new lead trigger level of 10 ppb. The action level remains at 15 ppb. The trigger and action levels are based on a 90th percentile calculation. If the trigger level is exceeded, water systems will be placed on annual sampling and may be required to conduct more

robust corrosion control studies or re-optimization of existing corrosion control treatment (CCT). Systems with an action level exceedance (ALE) will be placed on 6-month standard monitoring. A Tier-1 Public Notice must be distributed within 24-hours, after the public water system learns of the action level exceedance. EPA has updated the mandatory health effects language that must be included. KDHE will provide systems with example public notice documents.

Since the corrosivity of the drinking water can cause lead and copper to enter solution, the corrosion control study is emphasized in the Rule and some changes have been made. Calcium carbonate stabilization will no longer be an option for CCT. Alkalinity and pH adjustment or phosphate addition will be the only CCT options. Phosphate-based corrosion inhibitors will have to be orthophosphate. In addition, some systems will be required to do lead service line replacements based upon a percentage of known and unknown lead lines. Systems will also be required to provide lead exceedance information to local public health officials. Based upon recent comments by EPA, KDHE is anticipating EPA may do away with the trigger level and just lower the lead action level, possibly to 10 ppb in the coming Rule improvements.

Sample site selection and tiering will concentrate on where the known lead is located in the system. Sampling sites are to be selected from the lowest tier. If insufficient sampling sites are available, systems must complete its sampling pool with the next higher tier sampling sites. For community water systems, Tier-1 is single-family structures served by LSL. Tier-2, multi-family structures served by LSL. Tier-3, single-family structures served by galvanized lines (If ever downstream of an LSL). Tier-4, single-family structures with copper pipes with lead solder. Tier-5, single or multi-family structures with the plumbing materials used at that site would be commonly found at other sites served by the water system. Non-Transient Non-Community Water Systems tiering is similar with only 3-tiers. Tier-1, sites served by LSL. There is no Tier-2. Tier-3, sites served by galvanized lines identified as ever being downstream of lead. There is no Tier-4. Tier-5, a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the water system. Any location with unknown materials cannot be used as a lead and copper sampling site.

Water sampling will also be changing. Currently all systems take a first-draw water sample following a minimum stagnation time of six hours. Systems with known lead service lines (LSLs) will be required to take a fifth-

What's in the new Rule?

Although EPA is planning on revising some details of the Rule as currently enacted, much of the following discussion will be contained in the final Rule improvements.

If a water system has known lead service lines, either system-owned or privately-owned, the system will be required to develop a Lead Service line Replacement Plan (LSLR). The LSLR has seven-required elements to be included:

1. A strategy for determining the composition of "lead status unknown" service lines
2. The standard operating procedures to conduct full lead service line replacement
3. A strategy for informing customers before a full or partial LSLR including risk mitigation.
4. For systems that serve more than 10,000 persons, a recommended LSLR goal rate in the event of a lead trigger level exceedance
5. A procedure for customers to flush service lines and premise plumbing following a LSLR
6. LSLR prioritization strategy for disadvantaged consumers and populations most sensitive to the effects of lead
7. A funding strategy for conducting LSLRs which considers ways to accommodate customers that are unable to pay to replace the portion they own.

Risk mitigations by the water system must include providing to the resident either a Point of Use (POU) treatment or "certified pitcher filter" and 6-month supply of replacement filters to resident prior to replacement. Plus offer to do one follow-up lead sample between three to six-months after lead line replacement.

draw water sample instead. The reasoning is that the fifth-draw sample will be more representative of the water in contact with the lead service line. Copper samples will remain a first-draw sample.

Any individual site that exceeds the action level of 15 ppb will be required to resample that location within 30 days. Systems with existing corrosion control will have to collect water quality parameter (WQP) samples at or near the test site within five days. Systems without CCT must conduct a corrosion control study. Systems will be required to determine where the lead is located at the sampling site and inform customers if it is within their service line or premise plumbing. This is currently called "Find and Fix", but may be changed to "Find and Assess", since water systems are not expected to fix the issue if lead is in the privately-owned piping. Each round of sampling must be conducted at the same sampling sites unless a change in the sampling location is prior approved by KDHE.

Please plan on attending one of the many operator training sessions where KDHE is presenting details of the LCRR and will be answering questions.

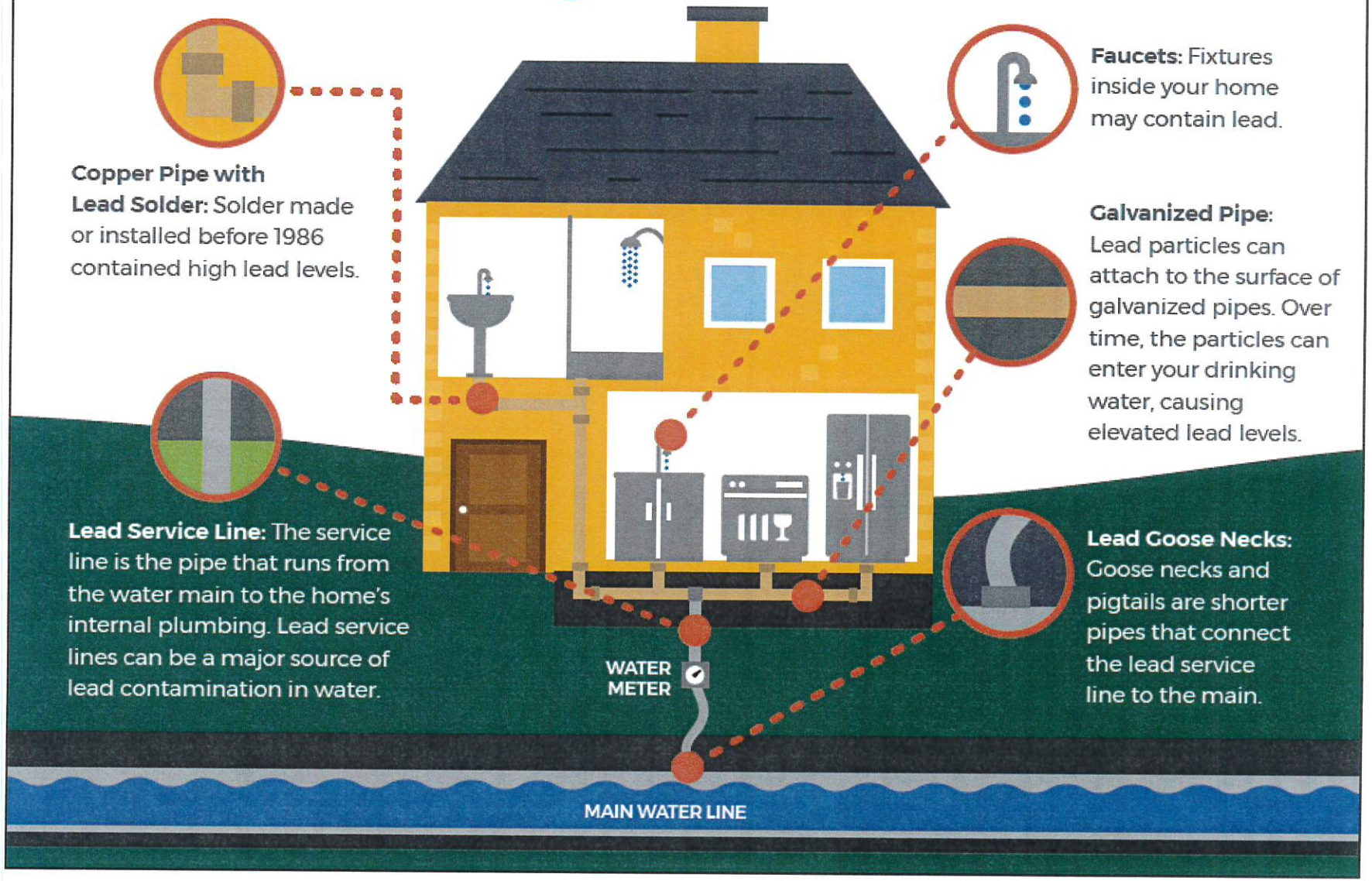
Water systems will be required to develop a list of schools and childcare facilities they serve. Systems will be required to sample 20 percent of Elementary Schools and childcare facilities each year for five years. Sampling locations and sampling protocols will follow the EPA 3Ts Guidance Document for schools. After the first five years, sampling will be done upon request. Secondary schools are only sampled upon request currently; however, this may change to include junior highs and high schools in the Rule improvements.

KDHE is working on funding to help water systems develop their inventories. $15 billion nationwide was included in the Bipartisan Infrastructure Investment (BIL) and Jobs Act for lead service line replacement. Kansas' portion is estimated at approximately $32 million. KDHE is currently awaiting EPA Guidance on how money can be used before finalizing the information. However, KDHE is working on a Request for Proposals (RFP) for technical assistance service providers to help water systems with LSL-Inventories. Soon, KDHE will be accepting proposals from prospective providers on different modules or work items. These services will be provided to water systems at no cost based upon available funding. Additional SRF loans with 49 percent principal forgiveness will be available to disadvantaged communities for lead service line replacement projects.

This article is intended as an overview of some of the changes contained in the LCRR. Please be aware the new Rule is very complicated, and all the details and specific actions contained in this Rule cannot be adequately covered in one article. Please plan on attending one of the many operator training sessions where KDHE is presenting details of the LCRR and will be answering questions. KDHE is also developing guidance documents for water systems to use when working with the public to identify piping and letters to help explain why water systems need the public's assistance in completing the required inventories. Guidance documents may be found on the Public Water Supply Section webpage at: https://www.kdhe.ks.gov/547/Lead-Copper-Rule\

Rob Gavin is currently the Compliance and Data Management Unit Chief in the Public Drinking Water Section of the KDHE Bureau of Water. He has been with the KDHE for 17 years. Prior to joining KDHE, he worked for more than 20 years with private consulting engineering firms specializing in drinking water and wastewater treatment.

Sources of **LEAD** in Drinking Water



Copper Pipe with Lead Solder: Solder made or installed before 1986 contained high lead levels.

Faucets: Fixtures inside your home may contain lead.

Galvanized Pipe: Lead particles can attach to the surface of galvanized pipes. Over time, the particles can enter your drinking water, causing elevated lead levels.

Lead Service Line: The service line is the pipe that runs from the water main to the home's internal plumbing. Lead service lines can be a major source of lead contamination in water.

Lead Goose Necks: Goose necks and pigtails are shorter pipes that connect the lead service line to the main.