February 12, 2020

Andrew R. Wheeler  
Administrator  
Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Mail Code: 1101A  
Washington, DC 20460

Re: National Primary Drinking Water Regulations  
Proposed Lead and Copper Rule Revisions  
Docket No. EPA-HQ-OW-2017-0300

Dear Administrator Wheeler:

The Kentucky Water Utility Council (KY WUC) of the Kentucky/Tennessee Section of the American Water Works Association appreciates the opportunity to provide input on the Environmental Protection Agency’s (EPA’s) Federal Register notice 40 CFR Parts 141 and 142 National Primary Drinking Water Regulations: Proposed Lead and Copper Rule Revisions (LCRR). KY WUC’s mission is to monitor and promote legislation that will assist water utilities in Kentucky in the efficient service of the public interest. In support of this effort, the comments provided herein are intended to focus utilities’ efforts on meaningful customer communication and activities having the greatest potential to promote reduction of lead in drinking water without placing a significant burden on utilities and their rate payers. The KY WUC also supports the detailed comments and recommendations prepared separately by the American Water Works Association (AWWA) and submitted to EPA on February 5, 2020 by Tracy Mehan, Executive Director, Government Affairs, AWWA.

Lead is a well-recognized public health concern, and we need to continue to make progress in eliminating lead exposure. The Lead and Copper Rule (LCR) is important for the protection of public health, which is a priority for the water utilities in Kentucky. Many Kentucky water utilities are already active partners with local and state health and education officials to enhance lead awareness and to identify solutions to reduce exposure to lead in our communities. Lead reduction is a shared responsibility that requires a collaborative effort by the water systems and its customers as well as a cross-section of local, state, and federal agencies. Financing of utility operations to meet rule requirements and paying for the removal of lead bearing materials, particularly on the customer’s side, remains a concern that we cannot fully comprehend at this early stage of evaluating the proposed rule.

We believe the recommendations provided in this letter will help increase the clarity of the rule and offer sensible solutions that address our areas of concern, which originate with the complexity and sometimes contradictory nature
of the proposed rule. In finalizing the rule, we encourage EPA to set attainable requirements that place water utilities in a position to be successful in meeting the goal of reducing consumer exposure to lead.

The outline below follows the subjects listed in Section VII of the preamble on EPA’s request for comment.

1. General Matters

1.1 There are references in the proposed rule to Section 141.83, but a section with this number could not be found.

1.2 According to a Costs of State Transactions Study (CoSTS) conducted by the Association of State Drinking Water Administrators (ASDWA), updated in 2020, in response to EPA’s LCR Federalism Consultation, state primacy agencies will have an increased total workload from this regulation of up to 790,000 staff years annually over and above the ongoing implementation of the current rule during the first 5 years. This is estimated to be 10 times greater than the current implementation. CoSTS estimates a significant increase in the number of hours necessary for state primacy agencies to track submissions, provide technical assistance, notify systems that have missed submission, and start enforcement actions for each of these categories:

- Regulatory start-up;
- Lead service line inventories, replacement plans, and replacements;
- Tap sampling;
- Trigger level and action level exceedances;
- Corrosion control treatment, including water quality parameter monitoring;
- Sampling site assessment (called find-and-fix in the proposed LCRR);
- Small system flexibility;
- Change in source or treatment, and source water monitoring and treatment;
- Public education and transparency;
- Lead testing in schools and child care facilities;
- SDWIS, data tracking and primacy agency reporting.

The proposed rule changes can easily double the current staff workload, which will increase the need for hiring new staff to work on LCR compliance and monitoring. In addition, a significant area of concern is the capability of existing SDWIS/State database to properly manage the proposed LCRR. States will need to modify their existing information systems, which would impose a significant financial and resource burden. The final LCRR should simplify the regulatory burden for primacy agencies.
Assumptions in EPA’s economic analysis are potentially an issue. Specifically, the cost burdens associated with modifying data systems may be understated and require contract support to the state primacy agency. The lack of certainty over EPA’s plans to modify SDWIS to manage the LCRR is a significant concern. The “Derivation of Administrative Burden and Costs” spreadsheet for the proposed LCRR accounts for 520 staff hours per state to modify existing data systems in-house and without factoring the need for contract support. It remains unclear if this cost estimate is based on EPA first making modifications to SDWIS, with the remaining 520 staff hours accounting for additional modifications to interfacing applications at the state.

**Recommendation:** EPA should provide additional context for the cost estimation for modifying data systems, including a commitment to develop a supporting module for SDWIS in advance of the LCRR implementation date.

### 2. Trigger Level

#### 2.1. Sections 141.81 and 141.82 – Exceeding the Lead Trigger Level

The concept of establishing a lead trigger level is beneficial for putting water systems on alert that results are approaching the action level. The KY WUC is concerned, however, that some of the actions required by the trigger level are overly burdensome and costly, when the action level is not exceeded. For instance, a system with corrosion control treatment whose 90th percentile exceeds the lead trigger level of 0.010 mg/L, but not the action level of 0.015 mg/L, would have to study and re-optimize corrosion control treatment. This would effectively make the trigger level the new standard at which a water system would have to take further action to modify corrosion control. Further, a trigger level and an action level will become confusing to the public, making communications a challenge for public health officials. The trigger level should only be used by utilities to plan for changes in corrosion control, and not require action for re-optimization of corrosion control, replacement of lead service lines, or notification of customers. Action steps should only be required when the action level of 0.015 mg/L is exceeded.

**Recommendation:** Establish a single level for action at 0.015 mg/L, while promoting corrosion control treatment to reduce levels below 0.010 mg/L. Actions steps for re-optimized treatment, replacement of lead service lines and customer notifications should only be required for water systems exceeding the action level.
3. Lead Service Line Requirements

3.1. Inventory

3.1.1 Section 141.2 - Lead Service Line definition – the definition of a Lead Service Line (LSL) is confusing as written. The definition should clarify when a galvanized service line is considered a lead service line, or EPA should consider a separate standalone definition for a galvanized service line.

Recommendation: The following revised definition should be adopted:

Lead service line means a service line, which connects the water main to the building inlet, comprised in any part of lead, excluding a service line where the sole component of lead is either a lead gooseneck, pigtail, or connector. A lead service line may be owned by the water system, owned by the property owner, or both.

For the purposes of this subpart, a galvanized service line is considered a lead service line if it is currently, or is known or likely to have been in the past, downstream of a lead service line or service line of currently unknown material. If the only lead known, presently or in the past, to be upstream of a galvanized service line is either a lead gooseneck, pigtail, or connector, then the galvanized line is not considered a lead service line. If a galvanized line is downstream of a service line of unknown material, the galvanized line shall no longer be considered a lead service line if the upstream unknown material is subsequently determined to be non-lead, unless the galvanized line is otherwise determined likely to have been downstream of a lead service line in the past.

3.1.2 Section 141.84(a)(1) - Inventory 3-Year Deadline and Section 141.84(a)(2) Information Available to Collect Inventory - It is not practical to develop an accurate LSL inventory within 3 years where records are not available, which is not uncommon for many water systems. In the absence of records, the only way to confirm the service line material using methods currently available is to excavate the entire line from the water main to the building inlet. Since excavation is not advised without replacement of the LSL, it is recommended that states be given the flexibility to allow water systems to utilize the best available information to assign an assumed material type.

The proposed rule assumes it is feasible to confirm the presence of LSLs during meter reading and meter inspections. This is not always a reliable means for determining the absence or presence of LSLs. In some water systems the LSL transitions to a riser for the meter setting where the riser is not made of lead. This situation often occurs in older systems that did not include meters with the original installation of the lead service line. The meter was often installed near the property line, downstream from a curb stop, and was cut into the lead service line. Therefore the piping material
used to connect the meter assembly (meter and meter setter) to the lead service line may not be lead. The presence of newer materials in the meter assembly, however, does not guarantee that it is not connected to lead on the public and/or private side due to past partial replacements, repairs to the service line or installation/replacement of meters. Undocumented materials installed during partial replacements or repairs over the years on both the public and private side of the service line will greatly hinder an accurate identification of the service line materials in place today.

Since identifying the presence of LSLs during meter reading and meter inspections is not always reliable, it is recommended that state primacy agencies have flexibility to allow water systems to utilize existing information to assign an assumed material type.

**Recommendation:** Allow the state primacy agency to establish guidelines for water systems to use in assigning material types to service lines, based on historical records, plumbing codes, work orders, field inspections, and other data sources.

3.1.3 Section 141.84(a)(3) - Service Line Categorization - A reasonable and practical approach to best categorize service line materials is needed. The proposed rule envisions water systems to be able to place service lines into one of three categories:

- Made of Lead;
- Not Made of Lead;
- Unknown.

It is likely that many water systems will not have complete records on all service lines and will not be able to point to an ordinance, plumbing code, or plumbing inspection records that specify a year when lead was no longer used. It is recommended that two sub-categories of unknown be established, based on the best available information as follows:

- “Unknown – Lead Probable” as unknown material but likely to be made of lead;
- “Unknown – Lead Not Probable” as unknown material likely not to be made of lead.

**Recommendation:** The following sub-category definition for unknown service line materials should be adopted:

i. Lead is not visually confirmed and no record on it exists but lead is highly probable to have been used in original construction based on the age of the structure it serves, and no records of lead service line replacement (LSLR) exists. In this case, the line
would be assigned as being “Unknown – Lead Probable”. This sub-category would be treated the same as “Made of Lead”;

ii. Non-lead materials are not visually confirmed and no record of it exists but non-lead materials are highly probable to have been used in original construction based on the age of the structure it serves or other records. In this case, the line would be assigned as being “Unknown – Lead Not Probable”. This sub-category would be treated the same as “Not Made of Lead”.

3.1.4 Section 141.84(a)(4) and Section 141.86 (a)(1) - Inventory Update - Once the water system qualifies for reduced monitoring, EPA proposes the required inventory update frequency remains annual. It is recommended that a water system on reduced monitoring be able to update the inventory on the same three-year schedule. In addition, the LCRR does not include regulatory language granting the state primacy agency the option to implement an LSL inventory waiver process. This is important particularly for states with few existing lead service lines and numerous small water systems, with reasonable knowledge of having no lead service lines based on the date of their construction, the use of other service line materials such as copper or plastic, and historical monitoring data with 90th percentiles below 0.015 mg/L. Flexibility for a waiver process for LSL inventories has the potential to substantially reduce the final LCRR burden on the primacy agency.

Recommendation: Once a water system qualifies for reduced monitoring, require the service line material inventory to be updated every three (3) years for water systems that do not exceed the trigger or action level. Include regulatory language that allows the primacy to implement an LSL inventory waiver process.

3.1.5 Section 141.84(a)(6) - State Primacy Agency Approval – It is recommended that EPA allow the state primacy agency to allow water systems to employ sensible methods to categorize unknown lines, such as historical records, plumbing codes, work order records, field inspections, and other data sources to determine a cutoff date for the use of lead materials. Service lines installed after this cutoff date, or service lines for homes built after this date, can then be categorized as “not made of lead”. This approach would help water systems direct the proper message to each category of customer. Using a reasonable approach to eliminate unknown LSLs that are not likely to be made of lead allows water systems to focus actions and communications efforts to the targeted customers. It would also help eliminate the wasteful distribution of lead educational materials to homes that are not affected by LSLs.
**Recommendation:** Allow the state primacy agency to establish guidelines for water systems to use in assigning material types to service lines, based on historical records, plumbing codes, work order records, field inspections, and other data sources.

Identification of service line materials by potholing (vacuum excavation) is costly. For outside meters, which is a common meter location in Kentucky and other states, a hole would be made on both sides of the meter. The holes would then need to be restored, which may be in a street, driveway, sidewalk, or sod. The very short section of pipe material in the relatively small hole is the only section that would be visible and may not be representative of the entire service line. The material could be different in other sections of the service line, due to partial replacement or previous repairs to the service line. There are also concerns with disturbing the scales and releasing lead during potholing. Therefore, it is recommended that potholing not be **required** to develop inventories, but be considered as one of several tools to use in identification of service line materials.

**Recommendation:** Do not **require** potholing (vacuum excavation) for establishing service line material inventories.

State primacy agencies should be allowed to establish guidelines for determining the service line material installed on the private property portion. To assist with this effort, it is recommended that EPA develop training materials, including a video, on how to properly identify LSLs. This would simplify the burden on water systems and provide consistent communication to property owners. This will provide a cost savings to water systems and reduce the risk of misclassification. Property owners who fail to respond to service line material surveys would be categorized as unknown for the private portion of the service line. When the property owner refuses to respond or cooperate with the water system, the unknown service line material should be excluded from calculations used to develop the water system’s lead service line replacement rates.

**Recommendation:** Allow the state primacy agency to establish guidelines for determining the service line material on private property. EPA should develop training materials for identification of service line materials on both public and private service lines. Service lines of unknown material on private property should be excluded from water system replacement rates when property owners do not cooperate with material identification.

3.1.6 **Section 141.84(a)(7) - Public Availability of Exact Address of LSLs** – The KY WUC supports EPA’s alternative for posting the locations of LSLs so that specific addresses do not have to be made publicly available.
3.2. **Replacement**

3.2.1. **Section 141.84(b) - LSLR Plan** – Replacement of LSLs at the same time as water mains is the most cost-effective strategy for a Lead Service Line Replacement (LSLR) program. If water main replacement projects are not the primary method for LSLRs, it is requested that the EPA and/or state primacy agency develop guidance on how LSLRs should be prioritized. Replacement criteria should consider the service line age, housing stock age, repair history, lead exceeding the trigger or action level, building occupancy, replacement of the private portion of the service line, or other factors impacting public health. The absence of such guidance could be problematic for water systems.

*Recommendation: EPA, with input from state primacy agencies, should develop guidelines to be used by water systems for prioritization of replacement of lead service lines when water mains are not being replaced. Criteria include service line age, housing stock age, repair history, lead exceeding the trigger or action level, building occupancy, replacement of the private portion of the service line, or other factors impacting public health.*

3.2.2. **Section 141.84(d)(1)(iii) - Filtering Pitchers for Partial LSLRs and Section 141.84(e)(1)(iii) Filtering Pitchers for Full LSLRs and Section 141.85(c)(5)(iii) – The KY WUC recommends EPA develop a list of approved pitchers and filters, and a replacement schedule for the filters, along with a process to add new pitchers and filters to the list, and provide guidance on what constitutes a “filter pitcher and tracking maintenance system” as mentioned in Section 141.84(b). Instead of automatically providing a filtering pitcher and filter cartridges, it is recommended these items be offered at no cost to the customer, if the customer requests it, when the LSL is partially or fully replaced and the customer refuses to replace the private LSL. If a customer is not interested in using filter pitchers, it seems wasteful to provide them. It is also recommended that delivery of filter pitchers for multi-family units be limited to a reasonable number of pitchers (i.e. one or two per building) and that the owner bear the cost of the filtering pitchers above this set number. It is also recommended that water systems be able to utilize other methods for lead mitigation such as customer installed point-of-use (POU) treatment devices, bottled water, or other methods that could be developed in the future, instead of limiting options to just filter pitchers.

*Recommendation: EPA should publish a list of approved pitchers and filters provided to customers by water systems when replacing full or partial lead service lines. EPA should allow state primacy agencies to develop the guidelines for providing pitchers and filters for single-family and multi-family homes and be allowed to approve alternative lead mitigation methods, including bottled water, customer installed point-of-use treatment and other approved treatment methods for removing lead.*
3.2.3. **Section 141.84(d)(3) and (4) - 45 Day Notification** – The KY WUC recommends that water systems be given more than 45 days to replace its portion of the LSL when notified by a customer. Extended time may be needed to follow public procurement requirements to complete the work and for weather delays. A timeframe of 90 days is recommended with the flexibility for the state primacy agency to give more time under extraordinary circumstances (weather, emergency, etc.).

**Recommendation:** EPA should allow up to 90 days to replace a lead service line requested by a customer, and allow an extension approved by the state primacy agency under extenuating circumstances (weather, emergency, etc.).

3.2.4. **Section 141.84(f)(1) and 141.84(f)(8) - Replacement Goals When Trigger Level Met** – It is recommended that EPA not require a water system to replace LSLs when the 90th percentile is above the trigger level of 0.010 mg/L but the action level of 0.015 mg/L is not exceeded. If the action level of 0.015 mg/L is exceeded, a replacement rate higher than 3 percent may be appropriate if the state primacy agency and the water system agree, through a collaborative process, considering the size of the system, number of lead service lines, financial capacity, affordability and other local factors.

**Recommendation:** EPA should not require a water system to replace LSL unless the action level is exceeded and replacement rates should be determined through a collaborative process between the water systems and state primacy agency, considering the size of the system, number of lead service lines, financial capacity, affordability and other local factors.

3.2.5. **Section 141.84(f)(2) - Affordability of Replacement Goals Based on LSLs When Trigger Level Met or Section 148.84(g)(1) When Action Level Exceeded** – This is an unfunded mandate that could be problematic for water systems with a large number of LSLs. Because the entire customer base will be paying the cost of a LSLR program, an alternative approach would be to base the annual LSLRs on the total number of customers. This would help keep LSLRs from using a water system’s entire budget. For example, if there are 100,000 customers in a system and the replacement rate is 1 percent of the total number of customers, then 1,000 LSLs would be replaced each year. If the estimated capital cost is $5,000 per LSLR then 1,000 would equal $5,000,000 a year. This could easily be 20 percent of a $25 million annual capital budget, which would be a suitable total capital budget for an older system this size with aging infrastructure in need of replacement. Requiring high numbers of LSLRs could force systems to defer other needed capital projects or to seek excessive water rate increases.
Recommendation: Allow water systems with a large number of lead service lines (i.e. greater than 15 percent of total service lines) to develop a replacement schedule approved by the state primacy agency as a percent of total service connections.

3.2.6. Section 141.84(g) - Annual Replacement Goals When Action Level Exceeded - The KY WUC has concerns with water systems being able to meet the replacement goals or mandatory rate because customers may not be able or willing to replace the customer-owned LSL. One Kentucky water system offering to pay 50 percent of the customer-owned LSL for customers, up to $1,000 each, reported only a modest level of customer participation (20 percent). For systems not subsidizing any cost of the customer-owned LSL, the customer participation is expected to be very low. It is recommended that water systems be deemed to have met the LSLR goal or mandatory rate when only customer-owned LSLs remain and customers are not responding to a water system’s documented efforts to encourage replacement.

Recommendation: EPA should allow water systems to have met their mandatory LSL replacement rates when they document customers have been notified and the property owner has chosen not to replace the private portion of the service line.

3.2.7. Section 141.84(g)(7) - Notification for Change in Residents When Action Level Exceeded – It will often be difficult to determine when resident occupancy changes. It is recommended that this special notification be eliminated and that occupants rely on the other prescribed notification requirements.

Recommendation: Eliminate special notification for occupancy changes when lead action level is exceeded.

3.2.8. Section 141.84(g)(9) - State Determination of Shorter LSLR Schedule When Action Level Exceeded – The KY WUC is concerned with the lack of a cap on the potential rate of LSLR that could be set by the state primacy agency where a shorter replacement schedule is deemed to be feasible. It is recommended that this section be removed, or, at a minimum, that the EPA specify that state primacy agencies are not able to require a system to replace more than a set percentage annually.

Recommendation: EPA should not require a water system to replace LSL unless the action level is exceeded and replacement rates should be determined through a collaborative process between the water systems and state primacy agency, considering the size of the system, number of lead service lines, financial capacity, affordability and other local factors.
3.2.9. **Section 141.85(e)(5)(ii) – Pitcher Filter for LSL Disturbance During Meter, Gooseneck, Pigtail Replacement** – Expanding the mandates for water systems to provide pitcher filters for these normal operational and maintenance activities would create a major concern with the current market availability of filter pitchers. Water meter replacement, for example, consists only of shutting off water for a short time and replacing the meter without any cutting of the pipe itself. One Kentucky water system changes approximately 10,000 meters, around 12 percent of its total meters, every year. A requirement to provide pitcher filters and three months of replacement cartridges after every meter replacement would amount to a significant cost burden on the system even if it were able to procure a sufficient number of filters and cartridges. It is recommended that water systems provide a good faith effort notification during meter, gooseneck, or pigtail replacements with instructions for flushing after these activities are complete.

**Recommendation:** Require water systems to make a good faith effort to notify customers to flush after replacement of meters, goosenecks or pigtail, and not require filter pitchers be provided to customers.

3.2.10. **Section 141.85(e)(5)(iv) – Notification Due to Disturbance of LSL** – It is recommended to remove the requirement for notification due to a disturbance caused by a customer turn off/turn on of a LSL under this section and for the water system to annually provide information about the potential for elevated lead as well as a flushing procedure and that pitcher filters not be required.

**Recommendation:** Allow water systems to provide annual general information on flushing to customers when a disturbance is caused by a service turn on/turn off, and filter pitchers or special notification will not be required to be provided to customers.

3.2.11. **Section 141.85(g)(1)(vi) – Signed Customer Letter** – It is recommended that the water system be able to provide documentation that procedures were followed to encourage customer or property owner participation in a LSLR program and that a signed letter from each customer stating such refusal not be required. In some cases the customer may be a tenant and not be the property owner. Experience from a large water system in Kentucky with a proactive LSLR program indicates that most customers or property owners will not respond to the water system notification and will not agree to replace the private portion of the service line, even when a subsidy is provided. It is unlikely that water systems will be able to obtain a letter from an uncooperative customer or property owner.

**Recommendation:** Allow water systems to document that procedures were followed to notify customers and property owners for participation in lead service line replacements on private property, and not require a signed letter from the customer or property owner.
4. **Corrosion Control Treatment**

4.1. While the intent of making requirements different for water systems of varying sizes, the following sections of the proposed LCR are overwhelming, complex and quite difficult to understand. Simplification and clarification of the requirements of this section would make compliance more effective. A few examples where clarification and corrections are needed include:

*Section 141.81(a)(1)(ii)* – this section for large water systems without corrosion control treatment refers to section (e) of this section, but section (e) refers to small and medium systems.

*Section 141.81(b)(3)(iv)* – this section needs clarification. It states “A water system is not deemed to have optimized or re-optimized corrosion control under this paragraph and shall implement corrosion control treatment pursuant to (b)(3)(v) of this section unless it meets the copper action level”.

*Section 141.81(d)(1)* – this section states “A water system exceeding the lead trigger level or the copper action level shall recommend optimal corrosion control treatment within 6 months after the end of the monitoring period…” while (d)(3)(i) of this section states “Large water systems that exceed the lead trigger level or copper action level shall complete the corrosion control treatment studies for re-optimization within 18 months.” These statements seem similar but stipulate different timeframes. The first statement should be clarified that a desk-top evaluation be conducted by the system to determine optimal corrosion control treatment and that the need for, and requirements of, a pipe loop study be determined through discussions with the state primacy agency (instead of automatically requiring a pipe loop study); and changes to corrosion control treatment be implemented on a reasonable timeframe following discussions with the state primacy agency.

*Section 141.82(f)(2)* – this section appears to duplicate section (f)(1) with the exception of the orthophosphate level. The KY WUC recommends that (f)(2) requiring an orthophosphate residual concentration equal to or greater than 1.0 mg/L be removed and that paragraph (f)(1) requiring an orthophosphate residual concentration equal to or greater than 0.5 mg/L be kept.
**Recommendation:** Review these sections of the proposed LCR to clarify and simplify the language.

4.2. Sections 141.81 and 141.82 – Corrosion Control Treatment (CCT) – Many water systems have optimized corrosion control treatment without the use of phosphates and some states regulate phosphate discharges into waterways. It is recommended that EPA not exclude technologies that may be available now or developed in the future for corrosion control treatment by adding a statement that other treatment options may be approved by the state primacy agency or EPA. Allow the state primacy agency to approve a treatment option if a water system can provide established optimum control treatment strategies with effective supporting data.

Further, the KY WUC recommends EPA clearly define source water treatment changes that trigger a CCT study more clearly (e.g. changes to source water change, pH, chloride to sulfate ratio, coagulant, etc.)

**Recommendation:** Allow EPA and state primacy agencies to approve CCT methods and technologies that may be developed in the future. EPA should clarify the types of changes in source water and treatment that will trigger a CCT study.

4.3. Section 141.81 and 141.82 - Corrosion Control Treatment (CCT) – The proposed rule does not consider the impact of mandating phosphate corrosion control and the potential impact with some state limitations on phosphate discharges under the Clean Water Act (CWA). The addition of a phosphate-based corrosion control inhibitor could result in the required installation of additional nutrient removal treatment. Further, simultaneous compliance with the SDWA should be considered when mandating phosphate corrosion control.

**Recommendation:** EPA should take a holistic approach for the final LCRR that takes into consideration simultaneous compliance with all drinking water regulations, as well as with regulations for wastewater discharges required under the CWA. EPA should make a more realistic assessment of CWA implications if the agency considers mandating the addition of phosphate-based corrosion inhibitors in the final LCRR.

4.4. Section 141.82(j) and 141.87(g) – Find-and-Fix Water and Quality Parameter Site – As currently drafted, the proposed rule implies that a water system would have to make a separate determination on potential corrosion control changes for each individual tap sample that is detected above the action level. The KY WUC recommends that water systems make a single determination of recommended changes to CCT at the end of the monitoring period based on a compilation of all information gathered. From a practical standpoint, CCT should be managed at the treatment plant and through operational best practices in the distribution system, and not on the results from a single
tap sample. The reference in the rule to “localized corrosion control treatment” implies that water systems are expected to build chemical feed stations for corrosion control in various locations throughout the system. If the intent of the proposed rule is to build remote treatment systems, these will be challenging to operate, maintain and secure. Additionally, the proposed rule could be read to direct a water system to establish a new permanent water quality testing site nearby to each sampling site that was found to exceed the lead action level. The KY WUC recommends that the state primacy agency have flexibility to work with the water system to collect representative samples and that the requirement to collect the water quality parameter sample on the same size water main located within one half mile of the original sampling location, within five days of receiving the original sampling results, be removed from the final rule. An alternative approach is for the state primacy agency to allow the water system to collect the water quality sample at the same time and in the same location as the follow-up lead tap sample. The KY WUC recommends that new water quality parameter sites added under the find-and-fix approach not be automatically added to the list of sites to be sampled in future monitoring. As an alternative approach, the KY WUC recommends that the state primacy agency review the water system’s existing and newly added water quality parameter sites and select only those sites for future monitoring that provide beneficial information.

**Recommendation:** Clarify the find-and-fix section of the proposed LCR to allow state primacy agencies to establish guidelines to address localized issues with elevated lead levels, including localized treatment, monitoring, sampling and corrective action to suit the unique parameters of the site and allow the follow-up lead tap sample and water quality sample to be collected at the same time and same location.

5. Tap Sampling

5.1. **Section 141.86(a)(3) – Tier 1 Sites – LSLs Where Only Customer-Owned Portion Is Lead** - There are multiple water systems across the United States, including water systems in Kentucky, that have been working for many years to remove both the customer-owned (private) and utility-owned (public) portions of LSLs. These water systems have been successful in removing the utility-owned (public) portion of the LSL but have encountered significant customer resistance in removing the customer-owned (private) portion of the service. As referenced in the “Replacement” section (item 3.2.6), one large water system offering to pay 50 percent of the customer-owned (private) LSL, up to $1,000 each, reported only a modest level (20 percent) of customer participation. For systems not subsidizing any cost of the customer-owned (private) LSL, the customer participation is expected to be very low. Even for systems that legally could subsidize the entire portion of the customer-owned LSL, many customers will not want them replaced. This first-hand experience
shows that it will be difficult, if not impossible, for water systems to comply with this rule if only the customer-owned (Private) LSL remains in the system. While customer education and communication concerning the need to remove the customer-owned (private) portion of the lead service is important, it should also be recognized that water systems have no control or capability to have private service lines replaced. Therefore, the KY WUC recommends that water systems should work in coordination with state and local agencies to address customer-owned (private) LSLs through targeted annual public education. However, including such sites in the Tier 1 pool would create compliance issues for which water systems have no legal authority to resolve or mitigate and could unfairly burden water systems and communities especially if trigger level and action level exceedances occur. Therefore, the KY WUC recommends that service lines with only the customer-owned portion being identified as lead to not be used as Tier 1 sample sites. As an alternative approach to excluding all customer-owned service lines from Tier 1 sampling, it is recommended that state primacy agencies have the flexibility to exclude from Tier 1 sampling those sites where the water system can provide documentation that a good faith effort was made to encourage replacement and that the customer refused to replace the private customer-owned LSL.

**Recommendation:** Change the last sentence of Section 141.86(a)(3) to read: “Service lines of unknown material or service lines with only the customer-owned (private) portion of the service line being identified as lead are not to be used as Tier 1 sampling sites” or grant state primacy agencies the flexibility to exclude as Tier 1 sampling sites locations where good faith efforts for replacement of customer-owned service lines have not been successful and the utility-owned service line is not made of lead.

5.2. **Section 141.86(b)(1) – First-Draw Tap Samples** – The KY WUC agrees with EPA’s belief that the first liter tap sample is effective. This will minimize the potential for error in the sample collection. The reference to paragraph (b)(5) in this section (and in section 141.86(b)(2)) does not seem to make sense.

**Recommendation:** First draw samples should be defined as the first liter sample.

5.3. **Section 141.86 (b)(2) – Non-First Draw Tap Samples** - Clarify the tap sample location by adding to the description “water that is typically drawn for consumption.” This may help assure that the customer does not collect a sample from a tap that is not frequently used. Also, clarify the reference to section (b)(5) as this section could not be located.

**Recommendation:** Clarify Section 141.86 (b)(2) by adding “water that is typically drawn for consumption” for tap sample locations and also clarify the reference to section (b)(5).
5.4. **Section 141.86(e) - Customer Requested Samples** - It is recommended that EPA revise the statement in this section to not include customer requested samples in the determination of the calculation of the 90th percentile. Customer requested samples are not part of the state primacy agency approved sample site plan.

**Recommendation:** Do not include customer requested sample results in the determination of the 90th percentile, since they are not part of the state primary agency approved sample site plan.

5.5. **Section 141.85(d)(2)(ii) – Notification of Results** - It is requested that EPA provide guidance on what is considered acceptable time notification of results over 0.015 mg/L. For example, what if a customer cannot be reached by phone, email, or in person? Options for confirmed receipt of notification within 24-hours are limited. It is recommended that water systems be required to attempt to notify the customer as soon as practicable using customer’s preferred method of communication based on paperwork at time of sample collection and to extend the customer notification requirements from 24 hours to two (2) business days to accommodate accurate communication to customer, considering weekends, holidays, weather or other emergency conditions. EPA should recognize that a exceeding the lead action level is a chronic health concern and not an acute health violation. Exceeding the action level should not be considered a Tier 1 health violation. Adequate time should be allowed to notify customer, considering the extent of lead level, the time to obtain lab results, and provide for holidays and weekends.

**Recommendation:** Allow customer notifications of results exceeding the action level of 0.015 mg/L within two (2) business days.

5.6. **Section 141.85(e)(2) – New Customer Notification of LSL** – It may be difficult for water systems to implement a reliable process that automatically determines when a new customer moves into a building with a LSL. The KY WUC recommends that this special notification be eliminated and that occupants rely on the other prescribed notification requirements.

**Recommendations:** Remove the requirement for special notification for new customers.

5.7. **Section 141.85(e)(5)(i) – Notification of Disturbance of LSL** – If a water system merely shuts off and then turns on water service with a LSL, such as a customer requested move out and move back in or for reinstatement of service following a payment delinquency, it is recommended that special notification be removed and that annual customer communication be used to educate the customer on the potential for elevated lead in drinking water as well as recommendations for flushing to remove particulate lead.
Recommendation: Allow water systems to provide annual general information on flushing to customers when a disturbance is caused by a service turn on/turn off.

5.8. Section 141.80 - 141.80(h)(3) – Notification Following Lead Action Level Exceedance – This section references subpart Q which incorporates exceedance of the lead action level into the Tier 1 notification requirements, which require notification of customers within 24 hours. Exceeding the action level should not be considered a Tier 1 health violation. For effective customer notification, 24 hours should be extended to two (2) business days to accommodate weekends and holidays.

Recommendation: Allow customer notifications of results exceeding the action level of 0.015 mg/L within two (2) business days.

6. Testing in Schools and Child Care Facilities

6.1. Section 184.92 – Testing in Schools and Child Care Facilities – The KY WUC supports the proposed rule’s alternative option of voluntary testing in schools and child-care facilities. The KY WUC also supports water systems encouraging school and licensed child-care facility administrators to pursue the testing of drinking water in those facilities and that procedures should follow EPA’s recommendations in its 3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities manual.

Recommendation: Adopt a voluntary program for lead testing in schools and daycares and reference the EPA’s 3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities for voluntary programs.

6.2. Sampling in Schools - When it comes to collecting samples, analyzing samples, and interpreting results and follow-up actions at the school and child care facility, it is recommended that each water system be permitted to choose its level of partnership, based on resource availability, size, age and type of school or child-care facility.

Recommendation: Allow water systems to establish a defined level of partnership for testing in schools, based on the available resources and the age, size and type of school or child-care facility.

6.3. Mandatory School Testing - Should EPA proceed with requiring water systems to complete mandatory school and child care facility testing, the KY WUC recommends the appropriate state, local educational and regulatory agencies be charged with the oversight of the schools and licensed
child care facilities be responsible for compiling a representative list of such facilities that should be tested annually and that schools be responsible for testing and notification, in coordination with the water provider.

**Recommendation:** If a mandatory school testing program is required by EPA, the responsibility should be placed on the appropriate state, local, educational and regulatory agencies to administer the lead testing program in coordination with the local water provider.

7. Small System Flexibilities

7.1. **Section 141.93 - Small and Medium System Challenges** – Kentucky has 432 public water systems, of which 325 serve less than 10,000 people (approximately 3,300 service connections). As of December 2019, all Kentucky water systems were in compliance with the current LCR. From an analysis of over 41,000 water samples from 2005 to 2019, less than 1.2 percent water samples had lead levels exceeding the 0.015 mg/L and the majority (97 percent) of samples had less than 0.010 mg/L, as shown in Exhibit 1.

![Exhibit 1 – Kentucky lead sample test results from 2005-2019 (Source: KY Division of Water)]
While the overwhelming test results in Kentucky indicate lead levels less than 0.010 mg/L, Kentucky’s small and medium water systems (serving fewer than 10,000 people or fewer than 3,300 connections) will have significant challenges in meeting the proposed LCRR, including the following:

- The lead trigger level of 0.010 mg/L will be especially challenging for small and medium sized water systems, as they often lack the capacity to conduct corrosion control treatment studies and implement corrosion control, especially if the small system is a consecutive system and does not have the capacity to treat water from a larger water system;

- Small and medium sized water systems do not have the resources to operate remote or localized treatment systems to reduce lead, nor the resources to administer customer POU treatment (pitcher filters, bottled water, or other POU devices);

- Small and medium sized water systems do not have the financial resources to replace lead and galvanized lines;

- Small and medium sized water systems do not have the administrative resources for managing a complex program to comply with the proposed LCR, including the technical and managerial resources to effectively communicate to customers;

- Small and medium sized water systems do not have the resources to manage a school and child care testing program.

**Recommendation:** EPA should consider the significant impact of the proposed rule on small and medium sized water systems and adjust the LCR requirements for these systems considering the availability of technical, managerial and financial resources. Further, EPA should provide resources (technical, managerial and financial) for small and medium sized water systems to manage the lead program. EPA should also provide grant funding to states for administration of the proposed LCR for small and medium sized systems.

8. Public Education and Outreach – no comments
9. Economic Analysis

9.1. The KY WUC is concerned whether the economic analysis considered the cost for installation of on-site treatment systems by customers for removal of phosphorous at levels above what can be tolerated by sensitive consumers. Examples include aquariums, home health requirements and some manufacturing processes.

Recommendations: Consider the impact of on-site water treatment by customers with special water quality requirements, such as for aquatic life (aquariums), individual home health, and manufacturing.

10. Record Keeping – no comments

We appreciate your consideration of these comments and would be happy to respond to any questions that you may have regarding our concerns. If we can be of assistance, please contact me at akramer@nkywater.org or Kay Sanborn at executivedirector@kytnawwa.org, phone (800) 665-0175.

Sincerely,

Amy Kramer
Chair
Kentucky Water Utility Council
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