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February 11, 2020

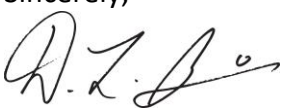
Andrew R. Wheeler
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, D.C. 20460

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

Dear Administrator Wheeler:

The District of Columbia Water and Sewer Authority (DC Water) appreciates the U.S. Environmental Protection Agency's efforts to revise the Lead and Copper Rule. Removing lead service lines is a tremendous effort and water systems cannot do so alone. DC Water believes EPA has taken important steps to put forward a revised rule framework that addresses many stakeholder concerns. We provided detailed comments on several rule provisions that would be challenging for water systems and regulators to implement. We hope that these comments will help EPA finalize the rule expeditiously.

Sincerely,



David L. Gadis
CEO & General Manager

***Corrosion Control***

EPA described optimization and re-optimization studies in 141.81 that have minimal difference in terms of research effort, time required for the water system to complete, and time for the State to review them. The specified time for study completion within 18 months is insufficient.

We suggest changing the re-optimization study to a desktop study that evaluates current operations and lead results. The water system may conclude from the desktop study that a coupon or full pipe loop study is need to evaluate changes in treatment and specify the time period for the plan, design, construction, operation, and analyses of the coupons or pipe loops.

A water treatment study that includes water testing should include water testing for a minimum of 1 full year to evaluate seasonal effects. The study design and construction will require 6 months minimum, but often longer for construction if space and lead service lines are not readily available. For example, lead service lines should be carefully extracted from a fully excavated trench. This activity cannot be done during freezing temperature months or rain. Pipe loop scales need to acclimate for after at least 1 year of routine operation to provide meaningful results. EPA should account for at least 3 years in their time to comply with any study requiring a pipe loop.

**141.81(a)(iii)** - The proposed rule grants the State the discretion to require a water system to re-optimization study if their 90$^{th}$ percentile is between 5-10 ppb lead. The regulation does not consider the source of elevated lead, which can be from a localized source due to household plumbing, including galvanized iron seeded with lead, fixtures, or lead solder that the rule's prescribed treatment techniques are not designed to control or reduce the release of lead into water. The option for a corrosion control study at these lower levels should be determined by the water system as they have many other competing treatment and infrastructure needs to balance. DC Water recommends including data review and source assessment prior to initiating a re-optimization study.

**141.82(c)(3)** - The proposed rule requires the water system to evaluate 1 mg/L and 3 mg/L doses of orthophosphate. Corrosion control treatment varies considerably based on numerous factors. The rule should provide more flexibility for water systems to design the study that is appropriate for their system based on their source water quality, treatment plant operation, distribution system materials, and wastewater effluent needs. Based on DC Water's experience, the higher dose of 3.0 mg/L produced an iron-phosphate-aluminum complex that made the water an opaque white color [insert reference]. We reduced the dose to 2.4 mg/L which eliminated the white water and effectively reduced lead levels (our recent 90$^{th}$ percentile lead level was 2 ppb). DC Water recommends removing the specified orthophosphate dose levels from the rule.

**141.82(j)** - The proposed rule requires a "Find-and-Fix assessment" for tap samples >15 ppb, which includes adding the monitoring areas to the Water Quality Parameter (WQP) required routine monitoring. DC Water recommends the single home assessment focus on customer engagement, identifying the lead sources for the individual home, and providing information to the owner about mitigation options. Individual home investigations should not automatically feed into system-wide corrosion control assessments. Corrosion control assessments must include

trending and larger system-level data rather than a single home. We strongly encourage EPA to remove the added WQP routine monitoring requirements.

**141.82(j)(1)** - The proposed rule requires the water system to "sample a new water quality parameter site that is on the same size water main in the same pressure zone and located within a half mile of the location of the action level exceedance within 5 days of receiving the sample results." Identifying a sample tap in a residential neighborhood, within ½ mile of a home, and has access for routine regulatory sampling would be incredibly challenging. DC Water recommends EPA state the objectives of corrosion control monitoring and provide guidance how to select sites rather than require specific characteristics that are not implementable or result in not meeting the intended objective.

The follow-up should also not require water testing (lead or WQP) in all cases. For example, the water system might have previously investigated the home with an earlier exceedance and found galvanized iron pipe inside the home. Other common causes of exceedances DC Water observes is when customer's collect a sample when the home has been vacant for months or during a kitchen remodel. Follow-up water testing is not beneficial until the home is occupied and not undergoing construction.

***Lead Service Line Replacement***

**141.84(d)(3) and (4)** – The proposed rule requires the water system to replace the lead service line it owns within 45 days when it is notified that a customer has replaced the customer-owned portion. A specified time period in the rule does not account for the water systems' other operation and construction needs, such as scheduled water main replacements that will include service line replacements. A specified time period also does not account for weather/climate periods when excavation work should not be conducted. Many water utilities do not do any planned construction between November and March. DC Water does not do replacement work during rain or snow due to increased hazards of trench collapse. Based on DC Water's experience implementing our Voluntary Lead Service Line Replacement Program, we determined the coordination with customers causes significant time delays due to their lack of owner availability and interest to meet with the contractor, apprehension around the disruption of the construction, and others issues. DC Water recommends that the regulation not specify a time period for completing these replacements and instead require water systems to include in the LSR Plan procedures for addressing their response to notices of completed lead service line replacements.

**141.84(e)** – The proposed rule requires the water system to notify the property owner and non-owner residents "within 24 hours of the [full lead service line] replacement." The regulation is confusing because it is not clear whether the water system is required to provided the notice 24 hours before replacement starts or within 24 hours after the replacement is completed. DC Water notifies the customer 48 hours in advance for any water shut-off. In addition, notice is left at the home after completion of any lead service line replacement.

DC Water recommends EPA revise the notification requirement to be delivered to the residents within 24 hours of completing a lead service line replacement. DC Water also recommends the

requirement to notify the homeowner be removed from regulation. Water systems have difficulty notifying non-resident owners. DC Water's experience of lead service line replacements for rental units focuses communication to the resident(s) of the property as they are the affected consumer. A full lead service line replacement will require engagement and permission from the homeowner to enter their property to replace the customer owner portion of the lead service line and the connection inside the home, so they will be aware of the activity. Therefore, the benefit of sending a letter within 24 hours is very small compared to the effort expended by the water system to ensure it happens.

**141.84(f) and (g)** - The proposed rule states "only full lead service line replacements count towards a water system's annual replacement goal" or "mandatory replacement rate.". DC Water, under EPA's direction, conducted thousands of partial replacements when the Lead Action Level was exceeded in 2002. DC Water currently has approximately 11,356 partial lead service lines that customers own on their private property. Under the proposed rule, it is not clear if replacing these "past-partials" counts toward the required replacements. The regulation should not give an incentive to prioritize a full replacement over a partial replacement if both results in removal of are all remaining lead pipe. The water system should have the ability to create their own prioritization based on residents (e.g., pregnant mother or infant children present), homeowner input, or water system operations input. DC Water recommends specifying that lead service line replacements which results in a full lead service line replacement, i.e., removes all remaining lead pipe servicing a building, count towards the "replacement goal" or "mandatory replacement rate" whether the replacement is performed on the customer-owned portion or water system owned portion, or both.

**141.84(g)(9)** - The proposed rule grants the State the discretion to shorten a water system's replacement schedule. If EPA will require replacement of lead service lines, specifying the percent of service lines is appropriate; however, allowing for the State to determine any schedule is not appropriate as it hinders the ability for planning and for water systems to address other infrastructure needs. DC Water recommends removing the provision to shorten the replacement schedule.

***Public Notification***

**141.85(d)(2)(ii)** - The proposed rule specifies that tap sample results with lead > 15 ppb must be delivered to residence within 24 hours. Delivering within 24 hours is challenging due to staff availability and the need to review results and letters prior to delivery. DC Water has a robust quality assurance program that ensures the data from the laboratory are correctly uploaded to our database and printed letters have correct metals concentrations and addresses. DC Water also operates a voluntary lead test program where any resident can request a lead test kit. We can receive results from a few hundred homes in one day. For homes with lead results of 15 ppb or higher, we review the sample form, point-of-entry pipe information provided, past service line work conducted at the home, and any other service line material information prior to calling the customer so we can provide informative guidance about how to minimize their exposure to lead. Consequently, time is needed to accurately process the data and properly communicate elevated lead results and guidance to the residents. Considering the samples were collected a month prior to receiving the results, and the health effects of lead differ from acute pathogen exposure,

additional time for QA/QC of the data is not only warranted, but needed. DC Water recommends notifying within 2 business days following the day the water system learns of the results.

**141.85(e)(5)** - The proposed rule states that water systems that cause disturbance to a lead service line that results in the water being shut off, and without conducting an LSR, must provide the consumer with information about the potential for elevated lead in water as a result of the disturbance as well as a flushing procedure to remove particulate lead.

DC Water agrees that the pipe scales can be disturbed when turning a valve on an individual service line, such as the shut of water for a meter changeout. However, water systems routinely shut off water to one or more blocks for maintenance activities and while the water in the service lines may have lower pressure, the pipe scales are not physically disturbed during the water main shut-off process. The regular opening and closing of faucets in the home, causes a water hammer effect that can generate more physical forces on the pipe wall than the reduction in water pressure due to the shut of a water main.

DC Water recommends EPA clarify that the "water being shut off" situations are limited to those associated with operating a valve on an individual service line and recommended revision to 141.85(e)(5) is "Water systems that operate a valve on a lead service line without conducting an lead service line replacement, must provide the consumer with information about the potential for elevated lead in drinking water as a result of the disturbance as well as a flushing procedure to remove particulate lead."

**141.85(e)(5)(ii)** - The proposed rule includes the replacement of the water meter with the replacement of a gooseneck, pigtail, or connector for requiring the water system to provide a filter kit. The water meter *setter* is designed for easy replacement of the water meter. The two activities (water meter replacement and water meter setter replacement) should be addressed separately in the rule. The maintenance activity for replacing only the water meter is to operate the shut-off valve(s) on either side of the water meter, unscrewing the couplings holding the meter, and replacing the meter. The replacement of the water meter only is covered in section 141.85(5) requiring notification of potential lead release, provision of water filters and instructions to flush. The replacement of a "water meter setter" is like the replacement of a portion of the service line such as gooseneck, pigtail, or connector, in terms of pipe scale disruption. DC Water recommends EPA revise the rule under 141.85(e)(5)(ii) to state "water meter setter" instead "water meter".

**141.85(e)(5)(iv)** - The proposed rule states the water system must comply with the requirements before the consumer's water is turned back on by the water system. During repair and maintenance activities, the field workers must turn the water on and off successively to check for water leaks. Therefore, the work might not be complete before the water is turned on if they see water leaking. Provided the notice is only required for water shut-offs to individual service lines, DC Water recommends that EPA revise the language from "before the consumer's water is turned on" to "immediately upon completion of the work."

**141.85(h)(2)** - The proposed rule states the water system must send annual notification to all customers with LSL by January 15. Specifying a two-week window and the specific dates is

unnecessarily cumbersome for the water system. Specific times of the year that are best for outreach differ by water system. For example, mailing around the holidays and the month of August results in a particularly poor response time. Utilities must also plan for outreach activities in coordination with operations so the staff are able to respond to the increased inquiries from the mail outreach. DC Water recommends that EPA remove "by January 15" from the rule.

***LCR Sample Pool***

**141.86(a)** - The proposed rule specifies that sites may not include faucets that have point-of-use (POU) or point-of-entry (POE) treatment devices. The proposed language infers that any home with a POU device on their kitchen faucet cannot be used in the Sample Pool, regardless of the potential of using another faucet in the home. DC Water and most water systems are challenged to get customers to participate in the sampling program and the proposed language places an unnecessary restriction on eligible sample homes. DC Water recommends the rule be revised to "Sites may not include point-of-entry (POE) treatment devices and sample taps may not have POU devices".

**141.86(a)(10)** - The proposed rule states, "A water system that cannot find sufficient number of sampling sites served by lead service lines shall still collect samples from every site served by a lead service line,". Requiring water system to collect samples from "every" site served by a lead service line cannot be achieved. Water systems do not have absolute control to obtain water samples from private property. DC Water recommends the rule language be revised to add "attempt to" before "collect".

**141.86(e)** - The proposed rule states, "The results of any monitoring conducted in addition to the minimum requirements (such as customer-requested sampling) shall be considered by the system and the State in making any determinations (i.e., calculating the $90^{th}$ percentile lead or copper level) under this subpart." This rule language could be interpreted to mean the water system would use samples collected from non-Sample Pool homes with lead service lines under any situation, i.e. not limited to only when the number collected from Tier 1 sites were less than the required number. Larger water systems with free customer-request lead testing programs process a large number of samples. The review and acceptance criteria for non-LCR sample sites are not as stringent as the LCR compliance program. For example, the customer-requested sample form has only a few questions about collection times and one question asking if they checked their faucets for leaks. We process the non-LCR samples whether the customer follows the sampling procedures or not, even if the minimum six-hour stagnation is met by the times recorded, and we do not require an answer to the question regarding leaks. Comparatively, our LCR Sample form has three questions regarding leaks and stagnation in addition to the three questions about collection times and all questions must be answered. DC Water recommends the rule more clearly specifies the circumstances which non-LCR samples would be used for the $90^{th}$ percentile calculation and those circumstances be limited to only situations where insufficient samples were collected from Tier 1 or Tier 2 sites.