

**Board of Water Works**  
of Pueblo, Colorado

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March 1, 2018

Peter Grevatt  
Director, Office of Ground Water and Drinking Water  
1200 Pennsylvania Avenue, N. W.  
Mail Code: 4601M  
Washington, DC 20460

**RE: Long-Term Lead and Copper Rule Federalism Consultation (Docket ID No.  
EPA-HQ-OW-2018-0007)**

Dear Mr. Grevatt,

The Board of Water Works of Pueblo, Colorado (Pueblo Water) appreciates the opportunity to offer comments to the U.S. Environmental Protection Agency as part of its federalism consultation on potential long-term revisions to the Lead and Copper Rule (LCR). Our system is a member of the American Water Works Association, a participating association in this federalism consultation, hence our submittal.

Pueblo Water is committed to protecting consumers of drinking water from exposure to lead. Improving the LCR to further reduce exposure to lead requires community-specific solutions that recognize the shared responsibility between consumers and water systems for managing exposure to lead in drinking water. We also recognize the importance of federal, state and community-wide investment in managing lead exposure from multiple sources: lead paint in housing, lead deposited in soils, sources of lead in schools, lead in other household items and lead in drinking water.

As EPA contemplates improvements to the Long-Term Lead and Copper Rule, Pueblo Water encourages a focus on actions that are feasible within current statutes so that we can move forward without confusion and additional delay. It is also critical that any requirement to change water chemistry provides flexibility to address local water quality and operational considerations. A federal rule that requires all water systems to use the same corrosion control treatment would be problematic. We hope that our observations assist in developing a protective rule within available resources while avoiding unintended consequences.

## Lead Service Line Replacement

Lead service lines were identified in our system in the early 1990's during routine main replacement activities and have been in the LCR compliance testing pool since. LCR and water quality parameter analyses indicated that our water system demonstrated optimal corrosion control for the water supplied to our customers as long as specified pH and alkalinity ranges are maintained and no action level exceedances for lead or copper were observed. The Flint, Michigan crisis in 2014 exposed several important weaknesses of the LCR and Pueblo Water began investigating how our system might be improved to limit lead exposure. In 2017 Pueblo Water began implementing a full lead service line replacement strategy in our service area. With this program, residential customers are offered full lead service line replacements at no cost to the property owner. Since very early records for our system are not detailed, even validating suspected lead service lines in our system is an on-going, labor intensive process and almost always requires excavation services.

We have identified, and tried to address where possible, the following challenges in removing lead from our system:

- Limited information on the pipe material in use on each customer's property.
- Customers who are unwilling to replace partial lead service lines or are unable to afford the cost of the partial service line replacement.
- As full or partial lead service lines are replaced, customers receive filter pitchers and monthly testing of their water to ensure lead levels are reduced after the replacement. This adds additional cost to an already costly replacement program.
- Replacement projects require coordination in order to minimize disruption to our community.

The following have been implemented to mitigate some of the challenges in removing lead from our system:

- Expanded our existing service line repair/replacement policy (that offers customers normal service line replacement or repair insurance for a \$1.00 / month fee) to include the entire replacement cost of discovered full lead service lines.
- Offered analytical services to customers to determine levels of lead and copper in their drinking water before and after full or partial lead service line replacements.
- Offered analytical services to all customers to determine levels of lead and copper in their drinking water if they are worried or suspect lead plumbing or lead solder in the home's piping.
- Provided filter pitchers, additional filters and additional information to customers about lead in drinking water and explaining that even after a full lead service line replacement, lead level can increase for a short time before a reduction is observed.
- Providing information to customers explaining how to reduce lead content in their drinking water for daily use by flushing prior to consumptive use.

- Initiated a collaborative effort with Pueblo City Schools to test all fixtures and premise plumbing in all operating schools to determine and mitigate possible exposure routes for students.

We are committed to establishing an inventory of lead service lines and improving its accuracy by gathering data during routine field work. While we will continue to identify possible lead service line locations and remove them once found, we know that the validation process will take years to complete.

### **Optimized Corrosion Control**

Because EPA appears to be seriously considering phosphate addition as the gold standard for corrosion control treatment, we are evaluating the potential impact of such a change on our system. Emerging considerations include:

- Coordinating with our wastewater treatment plants about the impact on meeting NPDES permit limits.
- Potential implications for managing iron and manganese release and the potential for colored water.
- Adjusting pH, which in turn affects disinfection CT, the maintenance of an effective secondary residual, and disinfection byproduct formation.
- The need to have a robust corrosion control program that considers other metals like stainless steel as well as concrete pipes.
- Given other systems' experiences, uncertainty that using theoretical solubility and pilot studies alone will necessarily lead to significant lead reductions.
- Since our system has always been a chloramine disinfection system, the possibility of disruption and migration of existing lead scales. Studies have shown that these specific scales can be destabilized, disrupted or dissolved by any type of phosphate addition and cause particulate and dissolved lead levels to increase.
- Public perceptions about our system and the drinking water we provide. Our system was deemed to have demonstrated optimized corrosion control (especially if pH and Alkalinity parameters were met) as early as 1998 based on years of Water Quality Parameter monitoring. If we are required to begin feeding additional chemicals in the drinking water to protect public safety, that sends an alarming message to consumers.

We continue to study the implications and possible effects of phosphate addition in our system but realize that the process we are contemplating (bench top and pipe loop-coupon studies) will take several years to complete. Additionally, even though it has been stated that no lead level is safe, target lead and copper action levels have not been established by a revised LCR regulation.

Regardless of additional information gathered in the laboratory or from published studies, the uncertainties described above will still remain and pose concerns for our system in real life conditions.

## Public Communications


Pueblo Water recognizes the importance of regular and transparent communication that helps customers address risks from lead in drinking water. In addition to required language in consumer confidence reports, our system provides:

- Lead information via the Pueblo Water website, in billing inserts and letters to customers detailing upcoming replacement efforts or routine main work that discovers full or partial lead service lines;
- Information to customers detailing how lead can get into drinking water and what consumers can do to protect themselves and reduce lead exposure at the tap;
- Sample bottles, analytical services and guidance on how to have water tested in the home;
- Information and service personnel to assist homeowners about how to identify and remove lead service lines and lead solder piping; and
- Referral to the Pueblo City-County Health Department for free blood tests for lead for those customers concerned about possible lead exposure.

We encourage the development of a national clearinghouse of information on lead to help water systems and other entities communicate effectively about lead risks across all media.

We hope that our comments help EPA develop sound rule options that further reduce risk posed by lead, recognizing the realities of local budgets and infrastructure renewal needs. If EPA has any questions regarding these comments, please contact me at Ex. 6

Best regards,



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