April 5, 2016

Joel Beauvais 
Deputy Assistant Administrator, Office of Water 
USEPA 
1200 Pennsylvania Ave., Mail code 4101M 
Washington, DC 20460

Dear Mr. Beauvais:

Thank you for your letter of February 29, 2016, inviting my leadership and partnership to strengthen our collective efforts to assure safe drinking water for all Americans.

Oregon has been on the forefront of addressing risks from lead in drinking water for many years. Based on a groundbreaking study of internal plumbing corrosion by the City of Portland, our Public Health Division took two specific actions in 1985 to reduce lead materials in drinking water systems. We worked with the state plumbing code authority to ban the use of lead-based solder in plumbing. We also required Oregon water suppliers to submit a schedule for identifying and removing any lead service pipes, or to certify that no lead service pipes exist. We learned through this effort that some lead service pipes were used in the past in Oregon, and that these were primarily lead “goosenecks” limited to several feet in length that connected the water main to the service line. The City of Portland, for example, identified around 10,000 lead goosenecks, and removed them over a ten-year period.

It has always been our goal to implement the Lead and Copper Rule (LCR) as EPA and the Safe Drinking Water Act intended. You asked me to take near-term action in five areas to address risks specifically from lead in drinking water, and I welcome strengthening our mutual commitment to these efforts:

1) **Confirm that the state’s protocols and procedures for implementing the LCR are fully consistent with the LCR and applicable EPA guidance.** We use the LCR and available EPA guidance as we understand them to direct our LCR implementation efforts. We appreciate clarifications to these as EPA provides them.
2) Use relevant EPA Guidance on LCR sampling protocols and procedures for optimizing corrosion control. We rely and depend on the EPA guidance, protocols, and procedures in these areas.

3) Post on our agency’s public website all state LCR sampling protocols and guidance for the identification of Tier 1 sites (at which LCR sampling is required to be conducted). The relevant EPA guidance and protocols are posted on our agency’s public website. www.healthoregon.org/dwp.

4) Work with public water systems – with a priority emphasis on large systems – to increase transparency in implementing of the LCR by posting on their public website and/or on our agency’s website:
   a. The materials inventory that systems were required to complete under the LCR, including locations of lead service lines, together with any more updated inventory or map of lead service lines and lead plumbing in the system. We required systems to submit a materials evaluation summary and certification that they conducted the materials evaluation as required, using EPA forms. The water systems retained their detailed evaluations, but we will notify large systems (those greater than 50,000 population) to encourage them to post their evaluations on their websites.
   b. LCR compliance sampling results collected by the system, as well as justifications for invalidation of LCR samples. LCR sampling data summaries for each sampling round are posted on our public-facing website for each water system https://yourwater.oregon.gov/. Sample invalidations are on paper in water system files, but we will begin to post new invalidations on the web pages with LCR sampling data summaries.

5) Enhance efforts to ensure that residents promptly receive lead sampling results from their homes, together with clear information on health risks and how to abate them, and that the general public receives prompt information on high lead levels in their drinking water systems. We are currently designing new functionality on our public-facing drinking water webpage to increase transparency for each system that exceeds the lead action level, beginning June 1, 2016. We will display the required steps with EPA-specified dates that they must take under the LCR, and their status on each of those steps. We will display dates of both the notifications of all individual lead results and health risk information, as well as dates for the wider general public education required within 60 days when lead action levels are exceeded.
We also recognize the need to conduct renewed outreach to water suppliers on LCR requirements generally, given that many years have passed since initial implementation. We plan to devote our next issue of the PIPELINE drinking water newsletter to this effort, and our staff will focus on LCR requirements at upcoming water supplier training events and stakeholder group meetings.

As the Primacy Agency for safe drinking water in Oregon, we have had considerable success in implementing the EPA Lead and Copper Rule since 1992. About 130 Oregon communities implemented corrosion control treatment to successfully reduce lead levels at the tap. Our drinking water program staff are working closely with USEPA Region X to assure that we are fully engaged with those water suppliers that have exceeded lead action levels in recent years, and with their water users.

I appreciate your effort to reach out to us as the Primacy Agency, and I welcome the opportunity to work closely with USEPA to assure that water users are protected from lead at the tap.

Sincerely,

Lynne Saxton
Director

CC: Peter Grevatt
Director, Office of Ground Water and Drinking Water
USEPA
1200 Pennsylvania Ave, Mail code 4601M
Washington DC 20460

Lillian Shirley BSN, MPH, MPA
Director, Public Health Division
800 N.E. Oregon St., Suite 930
Portland OR 97232

Commissioner Nick Fish
City of Portland
1221 S.W. 4th, Room 240
Portland, OR 97204
Dear Director Saxton:

There is no higher priority for the U.S. Environmental Protection Agency than protecting public health and ensuring the safety of our nation’s drinking water. Under the Safe Drinking Water Act (SDWA), Oregon and other states have the primary responsibility for the implementation and enforcement of drinking water regulations, while the EPA is tasked with oversight of state efforts. Recent events in Flint, Michigan, and other U.S. cities, have led to important discussions about the safety of our nation’s drinking water supplies. I am writing today to ask you to join in taking action to strengthen our safe drinking water programs, consistent with our shared recognition of the critical importance of safe drinking water for the health of all Americans.

First, with most states having primacy under SDWA, we need to work together to ensure that states are taking action to demonstrate that the Lead and Copper Rule (LCR) is being properly implemented. To this end, the EPA’s Office of Water is increasing oversight of state programs to identify and address any deficiencies in current implementation of the Lead and Copper Rule. EPA staff are meeting with every state drinking water program across the country to ensure that states are taking appropriate actions to address lead action level exceedances, including optimizing corrosion control, providing effective public health communication and outreach to residents on steps to reduce exposures to lead, and removing lead service lines where required by the LCR. I ask you to join us in giving these efforts the highest priority.

Second, to assure the public of our shared commitment to addressing lead risks, I ask for your leadership in taking near-term actions to assure the public that we are doing everything we can to work together to address risks from lead in drinking water. Specifically, I urge you to take near-term action in the following areas:

1. Confirm that the state’s protocols and procedures for implementing the LCR are fully consistent with the LCR and applicable EPA guidance;

2. Use relevant EPA guidance on LCR sampling protocols and procedures for optimizing corrosion control;

3. Post on your agency’s public website all state LCR sampling protocols and guidance for identification of Tier 1 sites (at which LCR sampling is required to be conducted);

4. Work with public water systems – with a priority emphasis on large systems – to increase transparency in implementation of the LCR by posting on their public website and/or on your agency’s website:

Internet Address (URL) - http://www.epa.gov
Recycled/Recyclable - Printed with Vegetable Oil Based Ink on 100% PostConsumer Process Chlorine Free Recycled Paper
the materials inventory that systems were required to complete under the LCR, including the locations of lead service lines, together with any more updated inventory or map of lead service lines and lead plumbing in the system; and

- LCR compliance sampling results collected by the system, as well as justifications for invalidation of LCR samples; and

(5) Enhance efforts to ensure that residents promptly receive lead sampling results from their homes, together with clear information on lead risks and how to abate them, and that the general public receives prompt information on high lead levels in drinking water systems.

These actions are essential to restoring public confidence in our shared work to ensure safe drinking water for the American people. I ask you for your leadership and partnership in this effort and request that you respond in writing, within the next 30 days, to provide information on your activities in these areas.

To support state efforts to properly implement the LCR, the EPA will be providing information to assist states in understanding steps needed to ensure optimal corrosion control treatment and on appropriate sampling techniques. I am attaching to this letter a memorandum from the EPA’s Office of Ground Water and Drinking Water summarizing EPA recommendations on sampling techniques. We will also be conducting training for state and public water systems staff to ensure that all water systems understand how to carry out the requirements of the LCR properly. Finally, we are working to revise and strengthen the LCR, but those revisions will take time to propose and finalize; our current expectation is that proposed revisions will be issued in 2017. The actions outlined above are not a substitute for needed revisions to the rule, but we can and should work together to take immediate steps to strengthen implementation of the existing rule.

While we have an immediate focus on lead in drinking water, we recognize that protection of the nation’s drinking water involves both legacy and emerging contaminants, and a much broader set of scientific, technical and resource challenges as well as opportunities. This is a shared responsibility involving state, tribal, local and federal governments, system owners and operators, consumers and other stakeholders. Accordingly, in the coming weeks and months, we will be working with states and other stakeholders to identify strategies and actions to improve the safety and sustainability of our drinking water systems, including:

- ensuring adequate and sustained investment in, and attention to, regulatory oversight at all levels of government;
- using information technology to enhance transparency and accountability with regard to reporting and public availability of drinking water compliance data;
- leveraging funding sources to finance maintenance, upgrading and replacement of aging infrastructure, especially for poor and overburdened communities; and
- identifying technology and infrastructure to address both existing and emerging contaminants.

As always, the EPA appreciates your leadership and engagement as a partner in our efforts to protect public health and the environment. Please do not hesitate to contact me, or your staff may contact Peter Grevatt, Director of the Office of Ground Water and Drinking Water at grevatt.peter@epa.gov or (202) 564-8954.
Thank you in advance for your support to ensure that we are fulfilling our joint responsibility for the protection of public health and to restore public confidence in our shared work to ensure safe drinking water for the American people.

Sincerely,

Joel Beauvais
Deputy Assistant Administrator

Enclosure
MEMORANDUM

SUBJECT: Clarification of Recommended Tap Sampling Procedures for Purposes of the Lead and Copper Rule

FROM: Peter C. Grevatt, Director
       Office of Ground Water & Drinking Water

TO: Water Division Directors
    Regions I - X

The Lead and Copper Rule, 40 C.F.R. Sections 141.80 to 141.91, requires monitoring at consumer taps to identify levels of lead in drinking water that may result from corrosion of lead-bearing components in a public water system’s distribution system or in household plumbing. These samples help assess the need for, or the effectiveness of, corrosion control treatment. The purpose of this memorandum is to provide recommendations on how public water systems should address the removal and cleaning of aerators, pre-stagnation flushing, and bottle configuration for the purpose of Lead and Copper Rule sampling.

Removal and Cleaning of Aerators

EPA issued a memorandum on Management of Aerators during Collection of Tap Samples to Comply with the Lead and Copper Rule on October 20, 2006. This memorandum stated that EPA recommends that homeowners regularly clean their aerators to remove particulate matter as a general practice, but states that public water systems should not recommend the removal or cleaning of aerators prior to or during the collection of tap samples gathered for purposes of the Lead and Copper Rule. EPA continues to recommend this approach. The removal or cleaning of aerators during collection of tap samples could mask the added contribution of lead at the tap, which may potentially lead to the public water system not taking additional actions needed to reduce exposure to lead in drinking water. EPA’s recommendation about the removal and cleaning of aerators during sample collection applies only to monitoring for lead and copper conducted pursuant to 40 C.F.R. 141.86.

Pre-Stagnation Flushing

EPA is aware that some sampling instructions provided to residents include recommendations to flush the tap for a specified period of time prior to starting the minimum 6-hour stagnation time required for samples collected under the Lead and Copper Rule. This practice is called pre-stagnation flushing. Pre-stagnation flushing may potentially lower the lead levels as compared to when it is not practiced.
Flushing removes water that may have been in contact with the lead service line for extended periods, which is when lead typically leaches into drinking water. Therefore, EPA recommends that sampling instructions not contain a pre-stagnation flushing step.

**Bottle Configuration**

EPA recommends that wide-mouth bottles be used to collect Lead and Copper compliance samples. It has become apparent that wide-mouth bottles offer advantages over narrow-necked bottles because wide-mouth bottles allow for a higher flow rate during sample collection which is more representative of the flow that a consumer may use to fill up a glass of water. In addition, a higher flow rate can result in greater release of particulate and colloidal lead and therefore is more conservative in terms of identifying lead concentrations.

**Conclusion**

EPA is providing these recommendations for collection of Lead and Copper Rule tap samples to better reflect the state of knowledge about the fate and transport of lead in distribution systems. The three areas discussed above may potentially lead to samples that erroneously reflect lower levels of lead concentrations. The recommendations in this memorandum are also consistent with the recommendations provided by the EPA’s Flint Task Force. For more information about the Task Force please view EPA’s website at: [http://www.epa.gov/flint](http://www.epa.gov/flint).

To provide further information on this topic, EPA included an amended “Suggested Directions for Homeowner Tap Sample Collection Procedures” in Appendix D of the 2010 revision of *Lead and Copper Rule Monitoring and Reporting Guidance for Public Water Systems* (EPA 816-R-10-004). This document can be found at: [http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100DP2P.txt](http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100DP2P.txt)

Please share these recommendations with your state drinking water program directors. If you have any questions, please contact Anita Thompkins at thompkins.anita@epa.gov.

**Attachment**

cc: James Taft, Association of State Drinking Water Administrators
Suggested Directions for Homeowner Tap Sample Collection Procedures
Revised Version: February 2016

These samples are being collected to determine the lead and copper levels in your tap water. This sampling effort is required by the U.S. Environmental Protection Agency and your State under the Lead and Copper Rule, and is being accomplished through a collaboration between the public water system and their consumers (e.g. residents).

Collect samples from a tap that has not been used for at least 6 hours. To ensure the water has not been used for at least 6 hours, the best time to collect samples is either early in the morning or in the evening upon returning from work. Be sure to use a kitchen or bathroom cold water tap that has been used for drinking water consumption in the past few weeks. The collection procedure is described below.

1. Prior arrangements will be made with you, the customer, to coordinate the sample collection. Dates will be set for sample kit delivery and pick-up by water system staff.

2. There must be a minimum of 6 hours during which there is no water used from the tap where the sample will be collected and any taps adjacent or close to that tap. Either early mornings or evenings upon returning home are the best sampling times to ensure that the necessary stagnant water conditions exist. Do not intentionally flush the water line before the start of the 6 hour period.

3. Use a kitchen or bathroom cold-water faucet for sampling. If you have water softeners on your kitchen taps, collect your sample from the bathroom tap that is not attached to a water softener, or a point of use filter, if possible. Do not remove the aerator prior to sampling. Place the opened sample bottle below the faucet and open the cold water tap as you would do to fill a glass of water. Fill the sample bottle to the line marked “1000-mL” and turn off the water.

4. Tightly cap the sample bottle and place in the sample kit provided. Please review the sample kit label at this time to ensure that all information contained on the label is correct.

5. If any plumbing repairs or replacement has been done in the home since the previous sampling event, note this information on the label as provided. Also if your sample was collected from a tap with a water softener, note this as well.

6. Place the sample kit in the same location the kit was delivered to so that water system staff may pick up the sample kit.

7. Results from this monitoring effort and information about lead will be provided to you as soon as practical but no later than 30 days after the system learns of the tap monitoring results. However, if excessive lead and/or copper levels are found, immediate notification will be provided (usually 1-2 working days after the system learns of the tap monitoring results).

Call ______________________ at ____________ if you have any questions regarding these instructions.

TO BE COMPLETED BY RESIDENT

Water was last used: Time__________ Date__________
Sample was collected: Time__________ Date__________
Sample Location & faucet (e.g. Bathroom sink): ______________________

I have read the above directions and have taken a tap sample in accordance with these directions.

Signature_________________________ Date______________