

## Portland Water Bureau Lead and Copper Rule (LCR) Compliance

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The Portland Water Bureau developed the Lead Hazard Reduction Program (LHRP) in 1997 in compliance with the Environmental Protection Agency's (EPA) Lead and Copper Rule for drinking water. This innovative program focuses not just on hazards from lead in water, but on all hazards posed by lead. It is designed to reach members of our community who are most at risk to lead exposure. The program was designed in collaboration with state and local public health agencies. It has four components:

**Treatment and monitoring** The Water Bureau has treated for lead and copper since 1997 by adding sodium hydroxide to the water. This helps reduce the amount of lead and copper that can leach into water from home and building plumbing. This process is called "corrosion control." Since corrosion control treatment was introduced, lead at the tap has been reduced by over 50 percent.

**Monitoring of high-risk homes:** The Water Bureau also monitors high-risk homes in the Bull Run distribution system twice a year. If lead levels exceed the action level of 15 parts per billion (ppb) established by the EPA, the bureau performs extensive outreach to its customers. In the most recent round of monitoring, conducted in fall 2020, the regulatory 90th percentile level of lead in water at high-risk customer taps was 13.8 ppb.

**Home lead hazard reduction grants** In partnership with the Portland Housing Bureau, the Lead Hazard Reduction Program provides local matching funds for \$3 million in Housing and Urban Development (HUD) grants over three years. These grants are used for lead assessment and remediation in eligible homes in the Portland area.

**Lead-in-Water Education and Testing program (LWET)** The Lead-in-Water Education and Testing program provides free lead-in-water testing to all homes in the Bull Run service area. The bureau conducts outreach for this program to homes built between 1970 and 1985 that have young children (ages six and under) or pregnant people in the home.

**Public education and outreach** The Water Bureau recognizes that lead in housing is a major contributor to childhood lead poisoning. We are committed to increasing awareness of lead hazards from all sources and targeting high-risk populations with our outreach. The program awards grants to community partners who conduct testing, remediation, education, and outreach activities about lead hazards. Grantees include the Community Energy Project, Community Alliance of Tenants, Growing Gardens, Multnomah County Health Department, and Portland Public Schools. We disburse a total of approximately \$391,000 to grantees each year.

**Improved Corrosion Control Treatment project (ICCT)** In 2014, after exceeding the lead-in-water action level, we initiated a water quality corrosion control study. The study concluded that improved treatment was the best way to further reduce levels of lead at customer taps. In 2016, as a result of this study, the bureau entered into an agreement with the Oregon Health Authority to install ICCT by April 2022. The improved treatment will increase the alkalinity (hardness) of Bull Run water while increasing the pH to at least 8.5.

Construction of the ICCT project started at our Lusted Hill facility this fall. The project will include a new building for the new corrosion control treatment system, two new silos for soda ash storage, a new utility water pump station, and piping and support systems. MWH Constructors is the Construction Manager/General Contractor (CM/GC) for the project, and they are committed to meeting the goals set by the City's Community Equity and Inclusion Plan (CEIP). Current projections show that the project will exceed the CEIP's stated goal of 22 percent of the project's hard construction costs going to firms certified by Oregon's Certification Office for Business Inclusion and Diversity. Over the next few months, underground piping and building foundations will be installed, with more significant construction activity expected to begin in spring 2021.

The bureau has agreed to follow an Interim Lead Reduction Plan to protect public health until the new ICCT project is online. The interim plan includes the following:

- Raise the pH of the water to 8.2
- Continue to offer free lead-in-water testing to all customers
- Increase education and outreach through mailings to multifamily residences and all homes built between 1970 and 1985
- Provide information on lead in water to all new billing accounts

After the ICCT is completed, the bureau anticipates being in full compliance with the LCR through treatment alone. As a result, our public education and outreach programs, home lead hazard reduction grants, and Lead-in-Water Education and Testing program will no longer be required to meet compliance. That will affect the program in the following ways:

**Public education and outreach:** Our education and outreach activities mostly relate to lead exposure from sources other than drinking water. We will no longer be able to provide funding for these activities once they are not required for compliance. We expect that this funding will not go beyond fiscal year 2022–23, with the exception of some funding for the Multnomah County Health Department (MCHD). We plan to continue providing funding to MCHD to support investigations of elevated blood lead level cases and intake of lead-in-water testing sample requests. This will allow us to provide additional monitoring for lead-in-water impacts for an additional year beyond the implementation of ICCT. We have been helping all grant recipients seek other funding sources.

**Home Lead Hazard Reduction grants:** The funding provided by the Water Bureau as part of the Education and Outreach portion of the LHRP is used by the Portland Housing Bureau as local matching funds for Lead Hazard Control grants from HUD. The Portland Housing Bureau has been awarded a

three-year, \$3 million grant through 2023. The remaining Water Bureau grant funds will be sufficient to support this grant's matching funds. Beyond 2023, the Portland Housing Bureau will have to identify additional local matching funds to continue to receive HUD grant funds.

**Lead-in-Water Education and Testing:** We plan to provide customers with free lead-in-water testing at least until the Bull Run Filtration project is active in 2027. Free lead-in-water testing will help customers understand how the ICCT project affects their water and will build their confidence in the project. Some aspects of the education portion of the program, such as targeted mailers, bill messaging, and brochures may be reduced, which may result in fewer customer requests. Additionally, it is likely that the free testing will no longer be provided to wholesale customers once it is no longer part of our compliance program.