



Portland Water District
FROM SEBAGO LAKE TO CASCO BAY

PWD protects public health by providing safe drinking water

Providing safe drinking water is a top priority at the Portland Water District and an important part of that effort is ensuring that potential sources of lead are identified and removed from the water system. The water source for Greater Portland's drinking water is Sebago Lake, whose water quality is among the highest of any lake in the United States. There is no measureable lead in Sebago Lake water, and a 1990's inventory found the PWD-owned system has no lead pipes or service lines. However, private services, building piping, plumbing systems and fixtures may contain lead and/or lead solder.

Like many sources, the pH of Sebago Lake's water is slightly acidic which, if untreated, can leach lead out of pipes and fixtures and into the water. To prevent this, PWD treats the water to prevent lead from leaching into drinking water. We do this with a combination of pH adjustment and the addition of zinc orthophosphate, which forms a protective coating inside pipes and fixtures. Water is regularly tested and adjusted to ensure that the corrosion control system is optimized. Our water quality is excellent and stable.

As a public water supplier, PWD is required to do all these things by the EPA through the Lead and Copper Rule (LCR). PWD is in full compliance with all aspects of the rule, which requires that one liter samples be collected from numerous single family homes and tested for lead. These samples contain water from both the faucet and a length of building plumbing. This sampling design demonstrates that corrosion control is highly effective on a community-wide basis.

The Maine legislature mandated that all K-12 schools test their drinking water for the presence of lead before May 31, 2022. The 250mL sample size required for this testing targets the actual fixtures used for drinking and culinary purposes—such as faucets, bubblers, ice makers, and outdoor spigots used to fill water bottles.

Given the different sampling strategies for the two programs, it is expected that results and their interpretations will be different. School fixture sampling has a Maine guideline of 4 parts per billion (ppb) for lead. The single family home sampling that PWD conducts to comply with the EPA regulation has the limit that 90% of the sample results must be lower than 15 ppb. (Portland's 2020 result was 3 ppb.)

New regulations regarding lead in drinking water will soon be in place for public water systems. The EPA's Lead and Copper Rule Revisions (LCRR) will be effective in October 2024. One aspect of this new regulation is that it requires PWD to conduct sampling, each year, of 20% of the elementary schools within our service area for lead, and provide results to each sampled school and local/state health department.

For more information, please visit our web site at <https://www.pwd.org/faqs/there-lead-my-water> or contact our Regulatory Advisor and Lab Manager, Mike Koza at mkoza@pwd.org