Frequently Asked Questions About Corrosion Control Improvements	
Goal: To share information about the Bureau's recommendation for improvements to Corrosion Control Treatment	Date: 2/6/17

What is being proposed?

In early March, the Portland Water Bureau will be asking for City Council approval to begin a corrosion control treatment pilot. This is the first step in the process of constructing additional treatment facilities for improved corrosion control.

Why is this needed?

The Portland Water Bureau's current compliance program, which includes partial corrosion treatment, has been in place since 1997. This program is in compliance with the requirements of the Lead and Copper Rule, and has reduced lead in water up to 70%. With recent exceedances of the action level for lead in water in Fall of 2013 and 2016, upcoming changes to our water system, and an increased understanding of health risks associated with low level exposure to lead, we have been evaluating the program. These corrosion control treatment improvements are an appropriate strategy for increased public health protection.

Why now?

After exceeding the action level for lead in water in the Fall of 2013 as well as changes to our drinking water system such as removal of the open reservoirs, the Portland Water Bureau began to look at ways to further reduce the levels of lead in drinking water. As a result, in 2014, the Portland Water Bureau began a Water Quality Corrosion Control Study. The results of that study indicate that enhanced treatment would be the most effective means to further reduce the levels of lead in water.

Why treatment improvements instead of replacing home plumbing?

Both the Environmental Protection Agency and Oregon Health Department have been clear that the replacement of home plumbing does not meet the compliance requirements of the Lead and Copper Rule. Even if it were an acceptable approach, a home plumbing program would be many times costlier to ratepayers than improved treatment, and would result in significant issues of equity and affordability for low-income homeowners and renters alike. Improved treatment will provide all customers with any sources of lead in their household plumbing equal access to its benefits at a fraction of the cost.

What chemicals will be added to the water?

The main objective of the corrosion control treatment pilot is to determine what the most effective treatment chemicals would be for our system. The most likely approach will be to further adjust pH and increase the alkalinity of the water. This is commonly done with treatment chemicals such as sodium carbonate and CO2.

What are the benefits of treatment?

As we now know, exposure to even low levels of lead can result in lowered IQ and other developmental delays in young children. Fortunately, the amount of lead in water exposure can be reduced through corrosion treatment. We already provide some corrosion control; this project would add to our treatment to make it even more effective. This approach has been implemented successfully in cities across the country.

Will it change or impact the taste of the drinking water?

One of the objectives of the corrosion treatment pilot is to look at other water quality impacts associated with increased corrosion treatment including taste and odor. While we do not have any definitive answers, the potential changes to water quality parameters are similar to what is seen when blending groundwater with Bull Run. During these times some customers notice a slight difference in the feel of the water due to the increased alkalinity, while the change goes unnoticed to the majority of our customers.

How will this affect our large users such as breweries?

We have begun to reach out to many of our large users such as breweries, manufacturers, bakeries, dialysis clinics and bottlers to inform them of the potential changes. So far the potential impacts are not expected to significantly impact their operations.

Have you notified the community?

In anticipation of the recent initial increase in pH as part of our interim lead reduction plan, the Portland Water Bureau notified our list of sensitive users. This list includes businesses, industrial users as well as residential customers interested in potential water quality changes. This messaging included information on the potential for long-term treatment changes. We have also been updating our website and will be including information in our annual Water Quality Report as well as working with the local media to help inform our customers.

When will these changes be made?

The current proposed schedule calls for the improved treatment to be in place in five and a half years. We continue to work with our regulators to establish an appropriate schedule while maintaining compliance with the lead and copper rule.

We are working with City Purchasing to find new and cost effective methods to integrate design and construction of the treatment facility. All plans must meet the City's specifications and be approved the Oregon Health Authority.

What is the total estimated project cost for improved corrosion control treatment facilities?

The total estimated project cost is between $15 and $20 million and includes the treatment pilot, design and construction costs. The project is not anticipated to result in a change to the forecasted water rates.