



Nick Fish, Commissioner  
Michael Stuhr, P.E., Administrator

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September 8, 2016

Dave Leland  
Drinking Water Program Manager  
Oregon Health Authority  
Portland State Office Building  
800 NE Oregon St., Suite 611  
Portland, OR 97232-2162

Subject: City of Portland Water Bureau  
Improved Corrosion Control Treatment

Dear Mr. Leland,

Thank you for providing an opportunity to meet with the Oregon Health Authority (OHA) and the Environmental Protection Agency, Region 10 in April and again last month. These meetings have been valuable and we look forward to continuing this collaborative partnership to discuss lead corrosion and corrosion control treatment. From these discussions we are proposing an updated schedule for improved treatment. This proposal is significantly shorter than the one presented in April.

In 2002, we committed to re-evaluate our corrosion control program in light of the system improvements that were made as part of the Long Term 2 Enhanced Surface Water Treatment rule (LT2). While we have not made significant changes to the treatment systems as part of LT2, there are changes to the distribution system that impact water quality as the open reservoirs are being disconnected from the system. As you are aware, the final elements of the open reservoir improvements will be in place by the end of 2020. This letter summarizes how we are following through with this commitment to evaluate our corrosion control program.

In 2014, we began a water quality study of the lead corrosion mechanisms within the Portland distribution system. This study is scheduled to be complete in mid-2017 and will offer a clearer understanding of the lead corrosion mechanisms in our system. We will then be prepared to evaluate improvements to the corrosion control treatment techniques to determine the most appropriate for our system. We will use this information to make a recommendation to the Portland City Council. The council will determine whether PWB moves forward with further evaluations, design and construction of improved corrosion control treatment.

We propose to continue to improve corrosion control by completing the projects listed below in the time frames shown on the attached schedule. Each of the projects outlined are subject to the authorization of the Portland City Council to authorize the funds necessary to complete the projects.

- Water Quality Corrosion Study (currently on going)
- Corrosion Treatment Pilot Study (RFP being prepared)
- Design of improved Corrosion Control Treatment Facility (if approved)
- Construction of improved Corrosion Control Treatment Facility (if approved)

The schedule for these projects presents a five year timeline from the point of a City Council decision, anticipated to occur in mid-2017, at the conclusion of the Water Quality Corrosion Study.

PWB is committed to maintaining compliance with state and federal drinking water quality regulations. Our schedule anticipates completing the study and gaining the Oregon Health Authority's approval within the timeframes outlined in the attached chart. A full 18 months will be required for the study because the evaluated treatment techniques will need to be tested to capture seasonal variations and supply scenarios. As an unfiltered surface water supply seasonal changes can be significant.

We propose a four-year timeframe for the design and construction of a new treatment facility. As an unfiltered supply with a distribution system composed of 65% unlined cast iron pipe, there will be a significant effort to construct new treatment facilities and prepare our distribution system for the changes in water quality. These efforts are necessary to anticipate and avoid any unintended adverse impacts to water quality. Our efforts will be significantly greater than a supply that already has a treatment plant where the adjustment needed could be a simple addition to an existing treatment facility.

Additionally, there are external risks that could impact the proposed schedule. PWB has experienced lengthy land use processes with numerous appeals on other large-scale projects. These extended land use processes hold up permits and private parties have also resorted to legal actions to delay projects. We propose to work with OHA to make any necessary adjustments to the schedule if needed.

Please let us know if any additional information is required, and if this proposal is acceptable.

Sincerely,



Michael Stuhr, P.E.  
Administrator

CC: Dan Opalski  
Office of Water and Watersheds  
EPA Region 10

Nick Fish, Commissioner  
City of Portland

