



**REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, NOVEMBER 20, 2019**

SUBJECT Communication Plan – pH & Corrosion Study

ISSUE SUMMARY

The Commission requested staff consider a public communication plan to accompany the upcoming pH & Corrosion Study.

BACKGROUND

As part of the multi-barrier approach to delivering drinking water to the region, the Capital Regional District (CRD) undertakes monitoring and assessments to evaluate any risks to human health and infrastructure, as well as to inform strategic, capital and operational planning.

Subsequent to a staff report (EEP-56) presented at the September 18, 2019 Commission meeting regarding recent changes to the Lead Drinking Water Quality Guideline, some Commission members expressed some concern for communicating potential risks to all regional customers of the drinking water service.

The CRD is undertaking a specific pH & Corrosion study to evaluate any risks associated with water quality (i.e., pH, alkalinity) and the potential to cause infrastructure corrosion and/or leach metals into the drinking water. One of the outcomes will be to evaluate risks to human health from lead concentrations in the drinking water. The source water for the regional service does not have any lead sources; however, lead may be present in some piping, as well as service line and building fixtures, especially in pre-1987 construction. The pH and Corrosion study is a phased approach to determine if and where any risks may exist across the regional service, including risks associated with lead concentrations at the customer's taps.

The Commission discussed the potential risks to home owners, especially those not connected through the internet, who may not be aware of the current research and information that the CRD has provided.

ALTERNATIVES

Alternative 1

That staff be directed to defer considering further public communications regarding potential risks to human health from potential lead concentrations in the drinking water until after the final results are received from the pH & Corrosion study.

Alternative 2

That staff develop a communication plan regarding potential risks to human health from potential lead concentrations in the drinking water concurrently with the implementation of the pH & Corrosion study.

HUMAN HEALTH IMPLICATIONS

The recent changes to the lead drinking water quality guideline (reducing the maximum allowable concentration of lead from 10 ug/L to 5 ug/L) has drawn a sharper focus on a planned study to evaluate the corrosive potential of the drinking water on infrastructure but also human health. The pH and Corrosion study identified in 2012, but delayed until the completion of the new treatment works, will investigate drinking water parameters (pH, alkalinity) on various aspects of the drinking water system. Current conditions indicate a low to moderate risk for corrosivity. Combined with a general absence of lead in the source water and limited evidence of lead in the piping infrastructure, overall human health risks are currently considered low for the regional service. However, Phase 1 of the study is required to understand the potential risks across the regional service and identify where further investigations, including tap sampling, might be warranted.

FINANCIAL IMPLICATIONS

An outreach campaign using print and radio would likely cost in the range of ~\$15,000-\$20,000.

INTERGOVERNMENTAL IMPLICATIONS

There is a need to collaborate with local governments and other wholesale purchasers of the regional bulk water to ensure consistent messaging and awareness of the issues and concerns. Staff would also need to work with Island Health officials to ensure proper public messaging. This collaboration will take some time to coordinate and would likely delay the start of the actual study, if the intention is to deliver the campaign concurrently with the study. In the absence of preliminary data, it would also be difficult to craft the appropriate messages. Staff currently assesses any human health risks as low and would not want to raise any unnecessary concerns in advance of receiving and analyzing the preliminary data due by the end of the year.

CONCLUSION

Currently, staff anticipate that any risks associated with water quality on corrosion and metal leaching are low, based on current pH and alkalinity data, source water quality, and the limited amounts of lead in the drinking water infrastructure. The planned study will identify any potential risks and whether further investigations are warranted.

Any outreach and education campaigns will need to be coordinated with both Island Health officials and all bulk water purchasers who provide drinking water to customers. In the absence of the study data, messaging would be premature and preliminary, likely leaving many questions unanswered for the public.

Based on the current available information and the time to develop any outreach material, staff recommend deferring any consideration for a public campaign until after the preliminary information is received at the end of the year.

RECOMMENDATION

That staff be directed to defer considering further public communications regarding potential risks to human health from potential lead concentrations in the drinking water until after the final results are received from the pH & Corrosion study.

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