



### Why are we adjusting the pH of our water source?

In March 2016, the Village undertook a water conditioning assessment, sampling drinking water from 20 Pemberton homes as a first step in determining how to improve the slightly corrosive nature of our water. The results indicated that the low pH and alkalinity of Pemberton's water was, in some cases, interacting with household fittings and fixtures resulting in elevated lead concentrations.

Working with engineers, the Village determined that the addition of soda ash to our source water would address the low pH and alkalinity. The control of pH and alkalinity is one of the most effective ways to minimize leaching from building plumbing systems and components.

The Canadian Drinking Water Guidelines consider pH as an 'Aesthetic Objective'. An 'Aesthetic Objective' is established for parameters that may impair the taste, smell, or colour of water but does not cause adverse health effects.



### What is the status of the Water Conditioning Project?

The construction of the Village Water Conditioning Plant is complete and has been operational since June 2017. The Plant was initially run at a lower pH set point during the commissioning phase to establish solution concentrations, test the equipment and controls and to carefully assess the chemical reactions with Pemberton's well water. The plant is currently operating at an 8% solution of Sodium Carbonate to water, which has achieved the target pH of 7.20.



### Has this Project been effective in reducing the corrosivity of our water?

In February 2018, the Village set out to assess the effectiveness of the water conditioning program, specifically the mitigation of corrosion in residential plumbing systems. As with 2016 testing, test locations were evenly distributed throughout the distribution system.

Two separate samples were taken over two days. Sample 1 was taken using a 1L container, first draw from a faucet that had not run for at least six (6) hrs. The following day, a second sample was taken using a 120mL container using the same first draw technique as the first sample. The one (1) litre sample size container was used to conform to the Federal standards for sampling for corrosion, while the second 120mL container was used as a control to relate to the samples taken in 2016. In summary, the results have indicated that the water conditioning program has been successful; both the 1L and 120ml first-draw samples were all well below the Maximum Acceptable Concentrates (MAC) for lead, and below the Aesthetic Objectives for Copper, Iron and Manganese. To view the water test results, visit the Projects & Initiatives Page at [www.pemberton.ca](http://www.pemberton.ca) and select the 'Water Conditioning Project' tab.



### Do I still need to flush?

Although the Water Conditioning Project has met its objective, Vancouver Coastal Health (VCH) recommends that water flushing continues. This recommendation is in effect in the entire VCH jurisdiction.

**The Village wishes to thank residents and businesses for their patience during the commissioning of the Water Conditioning System.**

### Questions?

Call the Village Office at 604.894.6135 or  
email us at [admin@pemberton.ca](mailto:admin@pemberton.ca).

