ENGINEERING & PUBLIC WORKS BULLETIN Corrosivity of Municipal Water

Effective: August 22, 2023

This bulletin has been prepared to provide information to all residents and property owners in the Town of Wolfville regarding the quality of our municipal water.

The Town of Wolfville provides treated municipal water to residents and building owners from two drilled wells in a common shallow sand and gravel aquifer. This source water is exceptionally high in quality, requiring only chlorination for disinfection, and minor pH adjustment. Fluoride is also added, which is consistent with municipal water treatment practices. The source water is pumped by submerged well pumps to an underground reservoir at the top of the Wolfville Ridge. Before entering the reservoir, the water undergoes disinfection and pH adjustment to meet the standards outlined in the Canadian Public Health Drinking Water Quality guidelines (the Guidelines), in accordance with the Town's Approval to Operate. The water is monitored continuously by sensors from the time it enters the reservoir, to the time it exits into the distribution system by gravity. To ensure compliance with the Guidelines, our operators carry out routine sampling of both source and treated water from different points in the system, followed by analysis of the samples by an accredited laboratory.

Corrosivity generally refers to how aggressive water is on pipes and fixtures. Though no single factor is responsible for how corrosive water can be, factors such as pH level and mineral content of the water are known to contribute to water corroding metal components, especially water heaters. Even though the Town delivers water meeting the Guidelines, it's essential for property owners to take proactive steps to maintain their plumbing systems and appliances if additional protection is desired. Corrosion concerns can be addressed at the individual building level through packaged treatment systems – the right system can effectively protect against corrosion. The Town also strongly advises building owners to invest in high-quality water heaters equipped with serviceable and replaceable anode rods. These rods are sacrificial in nature, and play an important role in preserving the integrity of the tanks. These rods should be inspected (and replaced, if needed) regularly. It's worth noting that many lower-priced water heaters in the sub-\$1,000 price range are made with generally lower material quality, and often lack serviceable anode rods altogether. These models tend to have limited warranties, and have much shorter lifespans as a result.

Though corrosivity is a concern we take seriously, our primary mandate is to deliver water that adheres to the Canadian Public Health Drinking Water Quality Guidelines. Our ground water ranks among some of the highest quality source water in the province, which is why it typically requires only minimal treatment.

I'm hopeful that the information provided in this bulletin serves as a helpful resource.

Prepared by: Alexander J. de Sousa, P.Eng., Director of Engineering & Public Works

Date Revised: February 9, 2024