Dear Customer:

The Cowichan Valley Regional District (CVRD) would like to advise customers that a pilot project using a sequestering agent for the treatment of iron and manganese was started on September 11, 2017. A summary on the sequestering agent pilot project is outlined below:

Background on Iron and Manganese Treatment for Lambourn Water System

The source water for Lambourn Water is from three groundwater wells. These wells have elevated levels of iron and manganese commonly found in well water in the Cowichan Valley. The presence of iron and manganese in drinking water supplies may be objectionable as they may cause discoloured water and staining of plumbing fixtures and laundry.

The manganese and iron, when in groundwater, are present in their dissolved form and are colourless. Once the water is pumped to the surface, the manganese and iron, through contact with oxygen and chlorine (used for disinfection), come out of solution and create the discoloured water. To treat the discoloured water, a greensand filtration system was brought online in 2014 to filter out the iron and manganese before the water is sent to the distribution system. The greensand filters have provided treatment but discoloured water concerns are still intermittently received from customers. Furthermore, due to how the greensand filters function, they must be backwashed with clean water after they have treated a certain volume of water. This backwashing uses a large amount of water and during the summer months the backwash cycle is completed two times a week due to the larger demand for water from the community. The backwash water is sent to the wastewater treatment plant and due to the high concentration of fine particulates in the backwash water, it puts additional strain on the treatment process.

The Sequestering Agent Pilot Project

The sequestering agent has been used at two other CVRD-operated water systems to treat iron and manganese. The sequestering agent is injected as the water comes into the treatment plant prior to chlorine injection. Since the water has not come into contact with the chlorine yet, the sequestering agent aids to keep the iron and manganese in its dissolved form and does not cause the discolouration of the water. The sequestering agent is a polyphosphate blend that is NSF ANSI Standard 60 certified for use in municipal water systems, and has received approval from Island Health.

The cost of the sequestering agent is low and has the very important benefit of not requiring the additional water and energy costs associated with the backwash cycle of the greensand filters.

As the long-term use of the sequestering agent is dependent on the effectiveness of the product, customer feedback is important. We welcome all comments and we are particularly interested in knowing if you notice any difference in water quality between cold and hot temperatures, any taste and odour issues, and overall differences in the water quality.

Please direct questions or concerns through the following:

***In person*: CVRD office, 175 Ingram Street, Duncan, Engineering Services Department**
***By mail*: CVRD, Engineering Department, 175 Ingram Street, Duncan BC, V9L 6M5**
***Email*: es@cvrd.bc.ca**
***Phone*: 250.746.2530**