Faulder Water System Update



Keeping the Region Informed

December 2016

In 2015/2016, the RDOS has been proceeding with the installation and commissioning of the upgrades to the Faulder Water System. These upgrades have included the drilling of a new potable well, installation of a stand-by generator and uranium treatment system, and the electrical and instrumentation upgrades for the entire water system.

It was anticipated that the commissioning of the water system upgrades would have been complete by this time thus enabling the removal of the Water Quality Advisory for uranium in the drinking water . Unfortunately several delays in connecting the new system into the existing Faulder water distribution system have occurred during commissioning.

- The new well had background bacteriological counts.
 - Tests show that the background bacteria counts drop significantly in the new well when it is in use.
- The anion exchange resin has tested positive for bacteria.
 - The resin canisters have been removed for cleaning and resin replacement by the supplier. Once the new well has been brought into service, the RDOS will operate the system for an undetermined amount of time to ensure it is performing as expected. Upon satisfaction with its operation the resin will be connected into the treatment plant for proceeding with uranium removal.
- A hydraulic operation issue occurred in the uranium treatment plant.
 - Changes in the pipework should have solved this issue. Confirmation will occur when the new well has been brought into service.
- The high lift pumps, that supply treated water from the uranium treatment plant, are not operating at planned capacity.
 - The electrical system has been modified to include an isolation transformer and larger variable frequency drives for the pumps to correct harmonic issues that were affecting the pumps operation.
 - The pumps have been removed and are undergoing tests and required work at the factory.

The Regional District has been working with the Consultants and Contractors to resolve these issues and in November planned to bring the new Faulder well into service. Unfortunately, due to the last identified issue with the high lift pumps, detailed above, this transition did not occur.

The short term water quality advisory that was issued November 16th, 2016 for the purpose of bringing the new Faulder well into service has temporarily been rescinded. It is expected that the new Faulder well will be brought into service in early January 2017. All works are under warranty.

Currently the Faulder Water System is operating using the old well and smaller pump and as such the Water Quality Advisory for uranium in the drinking water still remains in effect (see back).

The Regional District would like to thank the Faulder community for their understanding and patience as the issues are worked through. Staff members are diligently working to get the Faulder Water System Upgrades operating correctly, safely and efficiently as soon as possible. Thank you for your cooperation and we look forward to full commissioning soon.



Serving the citizens of the Okanagan-Similkameen since 1966. www.rdos.bc.ca

The views expressed in this letter are those of the Directors and do not necessarily reflect those of the Corporation or the full Board of Directors.

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December 2016

WATER QUALITY ADVISORY REMINDER

Re: Uranium in Drinking Water

The RDOS wishes to remind all Faulder Water System users that the Water Quality

Advisory for uranium remains in effect until further notice.

The measured levels of uranium continue to exceed the current maximum allowable concentration of 0.020 mg/L as defined in the *Guidelines for Canadian Drinking Water Quality* and remains consistent with historical measurements.

Research has suggested that there may be kidney damage when uranium levels exceed 0.06 mg/L. Canada has adopted a safe limit of 0.02 mg/L and the United States has adopted a safe limit of 0.03 mg/L.

The Interior Health Authority has recommended that users of drinking water where uranium levels are measured between 0.02 mg/L and 0.03 mg/L be advised of the potential health concerns. Radiation from uranium at these levels of concentration is not a concern. For the community of Faulder, persons with known kidney disease and concerned individuals may wish to choose to consume an alternate source of water until the new uranium treatment system is up and running.

Boiling the water will not lower the uranium level.

Important Numbers

RDOS Main Office: 250.492.0237 TF 1.877.610.3737

Water General: 250.490.4135

Water Quality: 250.490.4106

After Hours Water Emergency: 250.490.4141

IHA: 250.770.5540

RDOS Water Conservation Ambassador: 250.492.0237 x 4110

REGIONAL DISTRICT RDOS OKANAGAN-SIMILKAMEEN

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