

Testing Program at a Glance

Greater Vernon Water uses a comprehensive testing schedule with weekly, bi-weekly, monthly and yearly testing. The details of that testing schedule are provided on this page and in the [Water Quality Monitoring Plan](#).

Weekly

Each week the sources that are in use are monitored for bacteria, temperature, turbidity and pH. In the summer months additional measures for algae are also incorporated into the sampling program.

In addition to the sources, designated sampling points are located throughout the distribution system. At these sites bacterial sampling and chlorine level measurements are completed. The bacterial tests are taken weekly and chlorine residuals are taken daily by certified operators. Online instrumentation is in place so chlorine, flow and turbidity can be viewed remotely at certain locations throughout the entire distribution system.

Bi-Weekly

During the months when there is no snow in the uplands, watershed sampling is completed. For the duration of this time Water Quality personnel assess the watershed.

Monthly

During the 3rd week of each month the source water is monitored for a more comprehensive list of parameters.

Testing of the water quality takes a specific look at hardness, alkalinity, sulphate, iron, nitrates, total and dissolved organic carbon, and UV transmittance to help us in our treatment decision.

Some of these results and the results from the weekly monitoring are combined into a report for Interior Health.

Yearly

To comply with Schedule B of the Drinking Water Protection Act and Regulations, sixty two samples are sent per month to a certified laboratory for analysis. Additional samples are analyzed at the RDNO laboratory.

Comprehensive analysis is taken annually at each source before treatment and at two sites within the Kalamalka and Duteau distribution. The comprehensive analysis includes 38 parameters including aluminum, uranium, iron, sodium and lead.

Giardia Performance Monitoring

The effectiveness of Chlorine to control Giardia is related to CT values. CT is the product of chlorine residuals in mg/L (C) and the time that chlorine is in contact with the water (T).

A 3-log reduction of Giardia cysts means 99.9% inactivation. For example, if there were 1000 cysts present, after treatment with chlorine all but 1 cyst would be inactivated.

Trihalomethanes (THMs) and Haloacetic acids (HAAs)

GVW monitors for THMs and HAAs at 8 locations within the distribution system four times a year