

2017 Annual Water Quality Report Summary

In 2017, Richmond residents enjoyed high-quality and reliable drinking water. Water Services staff collected 2,065 water samples from 40 sampling sites to ensure excellent water quality.

Richmond is dedicated to promoting the value of municipal tap water, maximizing opportunities for use of tap water in municipal facilities and developing strategies for making tap water the “water of choice” in our community.



Taking a sample



Testing a sample



Project WET



PRV station

How does Richmond provide high-quality tap water?

- By testing all 40 water quality sites on a regular basis.
- By continuous preventative maintenance and monitoring.
- By providing the water system with the highest degree of care to ensure that it's an inhospitable environment for any harmful bacteria or toxins.
- By proactive watermain replacement and maintenance projects.

Multi-Barrier Approach

Richmond recognizes that in order to provide the highest quality water, several methods must be used to ensure its superiority – hence the “Multi-Barrier Approach”.

The “Multi-Barrier Approach” includes:

- disinfection of the water at the source;
- water quality monitoring capabilities at seven pressure reducing valve (PRV) stations;
- weekly microbiological testing;
- system operators that are certified by the Environmental Operators Certification Program of BC;
- maintenance practices that are of the highest standard.

Heterotrophic Plate Count (HPC)

- The HPC count indicates the presence of nutrients that could facilitate the growth of harmful bacteria such as E. coli.
- By reducing the HPC levels, the possibility of bacteriological re-growth is essentially reduced.
- The minimal positive chlorine residual in our water also disinfects and eliminates harmful substances within our distribution system.

2017 Results

- Provided 35.3 million m³ of the highest quality drinking water to over 218,300 Richmond residents.
- Conducted 2,065 microbiological tests from 40 test locations.
- Maintained 12 pressure reducing valve (PRV) stations.
- Maintained 4,848 fire hydrants to ensure water is available during an emergency.
- Repaired 19 watermain breaks without compromising the integrity of the water distribution system while maintaining positive pressure.
- Discovered and repaired six non-visible underground leaks through Richmond's leak detection program using noise loggers measuring sound frequencies in the targeted pipe allowing any leaks to be heard and recorded.
- Hosted over 360 students and teachers from Richmond elementary schools as part of the annual educational program: Project WET.
- Repaired 251 service connections.
- Installed 4,800 m of new Capital watermain.
- Installed 474 water services for new developments.

Summary

Richmond residents will continue to enjoy drinking water that is fresh, reliable and of high-quality. It is without a doubt that the City of Richmond consistently excels at providing tap water of excellent quality!