

2019 Annual Water Quality Report Summary

In 2019, Richmond residents enjoyed high-quality and reliable drinking water. Water Services staff collected 2,046 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.



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.

2019 Results

- Provided 34.9 million cubic metres of the highest quality drinking water to over 224,800 Richmond residents.
- Conducted 2,046 microbiological tests from 40 test locations.
- Maintained 12 pressure reducing valve (PRV) stations.
- Provided service to Richmond's 4,966 fire hydrants to ensure water is available during an emergency.
- Repaired 29 watermain breaks without compromising the integrity of the water distribution system while maintaining positive pressure.
- Discovered and repaired 30 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 300 students and teachers from Richmond elementary schools as part of the annual educational program: Project WET.
- Repaired 178 service connections.
- Installed 7,466 metres of new Capital watermain.
- Installed 202 water services for new developments.

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 eight pressure reducing valve (PRV) stations.
- Weekly microbiological testing at 40 test locations.
- Maintenance practices that are of the highest standard.
- System operators that are certified by BC's Environmental Operators Certification Program (EOCP).

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.

Summary

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