

2022 Annual Water Quality Report Summary

In 2022, Richmond residents enjoyed high-quality, safe and reliable drinking water. The Annual Water Quality Report identifies rigorous measures taken to protect the City's water supply and demonstrates testing results from water sampling with full transparency in accordance with regulatory requirements.

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 high-quality drinking water is free from any harmful bacteria or toxins.
- By proactive watermain replacement and maintenance projects.

2022 Results

- Provided 33.3 million cubic metres of the highest quality drinking water to over 230,584 Richmond residents.
- Between 2020 and 2022, the per capita consumption decreased by 2.4%, resulting in the conservation of about 800,000 cubic metres of water in 2022.
- Conducted 2,048 microbiological tests from 40 test locations.
- Maintained 12 pressure reducing valve (PRV) stations.
- Repaired 16 watermain breaks without compromising the integrity of the water distribution system while maintaining positive pressure.
- Discovered and repaired 90 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.
- Provided service to Richmond's 5,109 fire hydrants to ensure water is available during an emergency.
- Repaired 205 service connections.
- Installed 4,180 metres of new capital watermain.
- Installed 170 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.