# Drinking Water Quality and Compliance Town of Redvers

### Introduction

The Water Security Agency and the Ministry of Environment requires that at least once each year waterworks owners provide notification to consumers of the quality of water produced and supplied as well as information on the performance of the waterworks in submitting samples as required by a Minister's Order or Permit to Operate a waterworks. The following is a summary of the Town of Redvers water quality and sample submission compliance record for the year of January 2022-December 2022 time period. This report was completed on January 25, 2023. Readers should refer to Water Security Agency's Municipal Drinking Water Quality Monitoring Guidelines, June 2015, EPB 502 for more information on minimum sample submission requirements and the meaning of type of sample. Permit requirements for a specific waterworks may require more sampling than outlined in the department's monitoring guidelines. If consumers need more information on the nature and significance of specific water tests, for example, "what is the significance of Selenium in a water supply", more detailed information is available from: <a href="http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index">http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index</a> e.html .

## Water Quality Standards Bacteriological Quality

| Parameter/Location | Limit              | Regular Samples<br>Required | Submitted | # of Positive Regular Submitted (%) |  |
|--------------------|--------------------|-----------------------------|-----------|-------------------------------------|--|
| Total Coliform     | 0 Organisms/100 mL | 52                          | 52 (100%) | 0 (0%)                              |  |
| E. coli            | 0 Organisms/100 mL | 52                          | 52 (100%) | 0 (0%)                              |  |

### Water Disinfection -

| Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples |                  |                |                |          |           |              |
|--|------------------|----------------|----------------|----------|-----------|--------------|
|  | Minimum          | Total Chlorine | Free Chlorine  | # Tests  | # Tests   | # Adequate   |
| Parameter  | Limit            | Residual Range | Residual Range | Required | Submitted | Chlorine (%) |
| Chlorine   | 0.1 mg/L free OR |                |                |          |           |              |
| Residual   | 0.5 mg/L total   | .21-1.81       | .15-1.61       | 52       | 52        | 52 (100%)    |

## <u>Water Disinfection - Free Chlorine Residual for Water Entering Distribution System from Waterworks Records-</u> From Water Treatment Plant Records

| Parameter              | Limit (mg/L) | Test Level<br>Range | # Tests<br>Performed | # Tests Not Meeting<br>Requirements |   |
|------------------------|--------------|---------------------|----------------------|-------------------------------------|---|
| Free Chlorine Residual | at least 0.1 | >0.02               | 365                  | 365                                 | _ |

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual is required for water entering the distribution system. Due to high Ammonia found in the raw water the Town of Redvers does not currently meet this requirement. The Town is actively pursuing possible treatment options to resolve this issue.

### Turbidity - From Water Treatment Plant Records

| Parameter | Limit | Test Level | # Tests Not Meeting | Maximum         | # Tests  | # Tests   |
|-----------|-------|------------|---------------------|-----------------|----------|-----------|
|           | (NTU) | Range      | Requirements        | Turbidity (NTU) | Required | Performed |
| Turbidity | 1.0   | .1288      | 0                   | .88             | 365      | 365       |

### **Chemical – Health Category**

All waterworks serving less than 5000 persons are required to submit water samples for SE's Chemical Health category once every 2 years. The Chemical Health category includes analysis for arsenic, barium, boron, cadmium, chromium, fluoride, lead, nitrate, selenium and uranium. The last sample for Chemical Health analysis was submitted on August 23, 2021. Sample results indicated that the provincial drinking water quality standards were not exceeded.

## **General Chemical**

All waterworks serving less than 5000 persons are required to submit water samples for SE's General Chemical category once every two years if a ground water source. The General Chemical category includes analysis for alkalinity, bicarbonate, calcium, carbonate, chloride, conductivity, hardness (as CaCO<sub>3</sub>), magnesium, sodium, sulphate and total dissolved solids. The last sample for General Chemical analysis was required in 2021 and submitted on August 23, 2021. Sample results indicated that there were no exceedences of the provincial aesthetic objectives.

## More information on water quality and sample submission performance may be obtained from:

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