## 2024 Drinking Water Quality and Compliance Annual Notice to Consumers

## 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 Burstall water quality and sample submission compliance record for the 2024 time period. This report was completed on March 11<sup>th</sup>, 2025. 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: http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index e.html .

# Water Quality Standards Bacteriological Quality

Parameter/Location	Limit	Regular Samples Required	Submitted	# of Positive Regular Submitted (%)
Total Coliform	0 Organisms/100 mL	24	27	0
E. coli	0 Organisms/100 mL	24	27	

## 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	.80 – 1.33	.70 – 1.13	24	27	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 Range	# Tests Performed	# Tests Not Meeting Requirements
Free Chlorine Residual	at least 0.1	74 - 1.67	365	0

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual is required for water entering the distribution system. Tests are normally performed on a daily basis by the waterworks operator and are to be recorded in operation records. This data includes the number of free chlorine residual tests performed, the overall range of free chlorine residual (highest and lowest recorded values) and the number of tests and percentage of results not meeting the minimum requirement of 0.1 mg/L free chlorine residual.

## 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	.0743	0	.43	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 March 15, 2023. Sample results indicated that the provincial drinking water quality standards were not exceeded.

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Result(s)	
Arsenic	0.010		00020_	
Barium	1.0		0682	
Boron		5.0	0.1	
Cadmium	0.005		00015_	
Chromium	0.05		00019_	
Fluoride (avg*)	1.5		17	
Lead	0.01		00010_	
Nitrate (avg.*)	45.0		0.9	
Seleniuum	0.01		<u>.00113</u>	
Uranium	0.02		0013	

## **General Chemical**

General Chemical						
Aesthetic						
Objectives * (mg/L)	(average)					
500	184					
No Objective	224					
No Objective	50					
No Objective	<u>0</u>					
250	<u>25.8</u>					
No Objective	<u>614</u>					
800	<u>199</u>					
200	<u>18</u>					
No Objective	<u>8.2</u>					
300	<u>39</u>					
500	102.7					
1500	<u>464</u>					
	Aesthetic Objectives * (mg/L) 500 No Objective No Objective No Objective 250 No Objective 800 200 No Objective 300 500					

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 and once per three months every second year if a surface water or blended surface/groundwater 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 on 2023 and submitted on *March 15, 2023*. Sample results indicated that there were no exceedences of the provincial aesthetic objectives for the General Chemical.

\*Objectives apply to certain characteristics of or substances found in water for human consumptive or hygienic use. The presence of these substances will affect the acceptance of water by consumers and/or interfere with the practice of supplying good quality water. Compliance with drinking water aesthetic objectives is not mandatory as these objectives are in the range where they do not constitute a health hazards. The aesthetic objectives for several parameters (including hardness as CaCO<sub>3</sub>, magnesium, sodium and total dissolved solids) consider regional differences in drinking water sources and quality.

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

Town of Burstall
P. O. Box 250, Burstall, Sask. S0N 0H0
Telephone Number – 306-679-2000 / Facsimile Number – 306-679-2275
burstall@sasktel.net



