

Drinking Water Quality and Compliance
Rural Municipality of Milton No. 292

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 Alsask water quality and sample submission compliance record for the January 1st to December 31st, 2023 time period. This report was completed on June 27th, 2024. 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	Regular Samples Submitted	# of Positive Regular Submitted (%)
Total Coliform	0 Organisms/100 mL	24	26	3.8
E. coli	0 Organisms/100 mL	24	26	3.8
Background Bacteria	Less than 200/100 mL			

Water Disinfection –

Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples

Parameter	Minimum Limit	Total Chlorine Residual Range	Free Chlorine Residual Range	# Tests Required	# Tests Submitted	# Adequate Chlorine (%)
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	0.23 to 2.18	0.1 to 1.96	24	26	79

**Water Disinfection - Free Chlorine Residual for Water Entering Distribution System from Waterworks Records-
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	0.52 to 3.9	364	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 (NTU)	Range (NTU)	# Tests Required	# Tests Performed	# of Days Exceeding Limit
Turbidity	<0.3 or 0.2 95% of Measurements each month; not to exceed 0.3 or 0.2 for more than 12 consecutive hours Never > 1.0	0.06 to 0.37	365	364	33 Readings exceeded limits due to mechanical malfunction.



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 sample for Chemical Health analysis was submitted on August 28th, 2023. Sample results indicated that the provincial drinking water quality standards were exceeded for Arsenic. Follow up samples taken on September 18 and October 30, 2023 were 0.0107 mg/L and 0.0100 mg/L respectively, and therefore arsenic is being monitored quarterly in 2024 to track any variance. Samples taken on April 18 and June 10, 2024 returned readings of 0.0094 mg/L and 0.0096 mg/L, respectively, indicating acceptable levels.

Parameter	Limit MAC(mg/L)	Limit IMAC(mg/L)	Sample Result(s)	# Samples Exceeding Limit	
Arsenic	0.010		0.0103	2/3	* Results expressed as average values for communities or waterworks that fluoridate drinking water supplies or those with elevated concentrations of fluoride or nitrates.
Barium	1.0		0.0277	0	
Boron		5.0	0.2	0	
Cadmium	0.005		0.00015	0	
Chromium	0.05		0.00019	0	
Fluoride (avg*)	1.5		0.42	0	
Lead	0.01		0.0001	0	
Nitrate (avg*)	45		2.3	0	
Selenium	0.01		0.00113	0	
Uranium	0.02		0.0005	0	

Chemical – Trihalomethanes (THMs) and Haloacetic Acids (HAAs) Not required in 2023

Parameter	THMs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1	0.00	0 (0 every 3 months in 2024)	0
Haloacetic Acids	0.08	0.00	0 (0 every 3 months in 2024)	0

General Chemical

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	317	1	1
Bicarbonate	No Objective	387	1	1
Calcium	No Objective	65	1	1
Carbonate	No Objective	0	1	1
Chloride	250	14.6	1	1
Conductivity	No Objective	848	1	1
Hardness	800	323	1	1
Magnesium	200	39	1	1
PH	No Objective	7.9	1	1
Sodium	300	78	1	1
Sulphate	500	133	1	1
Total dissolved Solids	1500	722	1	1

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 CaCO₃), magnesium, sodium, sulphate and total dissolved solids.

The sample for General Chemical analysis was required in 2023 and was submitted on August 28th, 2023. Sample results indicated that there were no exceedances of the provincial aesthetic objectives for the General Chemical category.

*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 hazard. The aesthetic objectives for several parameters (including hardness as CaCO₃, 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:

Rural Municipality of Milton No. 292
Box 70 Marengo, SK S0L 2K0
306-968-2922/Fax: 306-912-8922
rm292.rm322@sasktel.net

The following is information on the Rural Municipality of Milton No. 292 – Division 7 water and sewer works, as required under The Municipalities Regulations.

2023 Waterworks Financial Overview:

Includes Conditional grants for capital purchases but not amortization:

- total waterworks revenues - \$89,418.00
- total waterworks expenditures - \$71,575.00
- total debt payments on waterworks infrastructure loans - \$0 (0 loans)
- comparison of waterworks revenues to expenditures plus debt payments, expressed as a ratio:

<u>\$89,418.00</u>	= 1.25 (For 2023, waterworks revenues covered 100% of
\$71,575.00	the waterworks expenditures with a surplus of \$17,843.00

The following waterworks information is available at the municipal office for public viewing:

- The Waterworks Rate Policy and Capital Investment Strategy
- the above financial information
- the 2020 waterworks assessment

Water Reserves Account Balance at December 31st, 2023 – \$118,994.21



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