

Drinking Water Quality and Compliance Annual Notice to Consumers <u>Town of Eatonia</u>

Introduction

The Water Security Agency 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 the Permit to Operate a waterworks. The following is a summary of the **Town of Eatonia** water quality and sample submission compliance record for the 2022 calendar year time period. This report was completed on May 8, 2023. Readers should refer to Water Security Agency's <u>Municipal Drinking Water Quality Monitoring Guidelines</u>, 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	52	52	θ
E. coli	0 Organisms/100 mL	52	52	θ
Background Bacteria	Less than 200/100 mL			

Water Disinfection -

Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples							
_	Minimum	Total Chlorine	Free Chlorine		# Tests	# Adequate	
Parameter	Limit	Residual Range	Residual Range	Required	Submitted	Chlorine (%)	
Chlorine	0.1 mg/L free OR						
Residual	0.5 mg/L total	0.53 – 2.07 mg/L	0.20 – 1.47 mg/L	52	52	52 (100%)	

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

Parameter	Limit (mg/L)	Test Level Range	# Tests Performed	# Tests Not Meeting Requirements	
Free Chlorine Residual	at least 0.1	0.15 – 2.00 mg/L	365	θ	

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)	95 th Percentile	# Tests Required	# Tests Performed	# of Months Exceeding 95 th Percentile Limit
Turbidity	<0.3 – 95% of measurements each month; not to exceed 0.3 for more than 12 consecutive hours; never >1.0	0.041 – 0.107	0.00	365	364	0



Chemical – Tribalomethanes (THMs)

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 29, 2022. 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)	# Samples Exceeding Limit	
Arsenic	0.010		0.0004	0	* Results expressed
Barium	1.0		0.0135	0	as average values
Boron		5.0	0.10	0	for communities or
Cadmium	0.005		0.00015	0	waterworks that
Chromium	0.05		0.00019	0	fluoridate drinking
Fluoride (avg*)	1.5		0.14	0	water supplies or
Lead	0.01		0.0004	0	those with elevated
Nitrate (avg.*)	45.0		1.4	0	concentrations of
Selenium	0.01		0.0017	0	fluoride or nitrates.
Uranium	0.02		0.0085	0	

Parameter	THMs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1	0.04473	4 (1 every 3 months)	4
Halo Acetic Acids	0.80	0.01163	4 (1 every 3 months)	4

General Chemical							
Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted			
Alkalinity	500	274	1	1			
Bicarbonate	No Objective	334	1	1			
Calcium	No Objective	243	1	1			
Carbonate	No Objective	0	1	1			
Chloride	250	36.0	1	1			
Conductivity	No Objective	1792	1	1			
Hardness	800	1109	1	1			
Magnesium	200	122	1	1			
PH	No Objective	7.7	1	1			
Sodium	300	46	1	1			
Sulphate Total dissolved	500	794.7	1	1			
Solids	1500	1588	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 last sample for General Chemical analysis was required on 2022 and submitted on September 12, 2022. Samples exceeded provincial aesthetic objectives for the General Chemical category for the following parameters: Hardness, Sulphate and Total Dissolved Solids.



*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 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:

Town of Eatonia P.O. Box 237, Eatonia, SK Eatonia, SK SOL 0Y0 Telephone – 306-967-2251 Facsimile – 306-967-2267 E-Mail address – eatonia@sasktel.net www.eatonia.ca