

**Drinking Water Quality and Compliance
Town Short Form – A Template for Annual Notice to Consumers**

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 a Minister's Order or Permit to Operate a waterworks. The following is a summary of the Fort Qu'Appelle water quality and sample submission compliance record for the 2017 calendar year. This report was completed on August 21st. 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	52	52	0
E. coli	0 Organisms/100 mL	52	52	0

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	0.24 – 1.42 mg/L	0.03 – 1.01 mg/L	52	52	88.5

**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 0.10 mg/L	0.02 – 1.89 mg/L	365	9

A minimum of 0.10 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 0.10 mg/L free chlorine residual.

Turbidity – From Water Treatment Plant Records

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity	# Tests Required	# Tests Performed
Turbidity	1.0 NTU	0.12 – 2.85 NTU	10	2.85	365	365



Chemical – Health & Toxicity and General Chemistry

All waterworks serving less than 5000 persons are required to submit water samples for SE's Chemical Health category once every 2 years. The last sample for Chemical Health & Toxicity analysis was required in 2017 and was submitted on January 31, 2017. 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 mg/L	0
Barium	1.0		0.0156 mg/L	0
Boron		5.0	0.1 mg/L	0
Cadmium	0.005		0.00015 mg/L	0
Chromium	0.05		0.00019 mg/L	0
Fluoride	1.5		0.09 mg/L	0
Lead	0.01		0.0004 mg/L	0
Nitrate	45.0		5.8 mg/L	0
Selenium	0.01		0.0027 mg/L	0
Uranium	0.02		0.0075 mg/L	0

All waterworks serving less than 5000 persons are required to submit water samples for SE's General Chemical category once every two years if the source water is ground water. The last sample for General Chemical analysis was required in 2017 and submitted on January 31, 2017. Sample results indicated that there were no exceedences of the provincial aesthetic objectives for the General Chemical category

General Chemical

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	330 mg/L	1	1
Bicarbonate	No Objective	403 mg/L	1	1
Calcium	No Objective	166 mg/L	1	1
Carbonate	No Objective	0 mg/L	1	1
Chloride	250	73.5 mg/L	1	1
Conductivity	No Objective	1610 mg/L	1	1
Hardness	800	662 mg/L	1	1
Magnesium	200	60 mg/L	1	1
PH	No Objective	7.6	1	1
Sodium	300	123 mg/L	1	1
Sulphate	500	472.9 mg/L	1	1
Total dissolved solids	1500	1314 mg/L	1	1

*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:

Fort Qu'Appelle Office
 Box 309 Fort Qu'Appelle SK,
 S0G 1S0
 Telephone Number 306-332-5266
 E-mail address forttownoffice@sasktel.net



**Saskatchewan
 Ministry of
 Environment**

