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

(Note: This short form may be used for communities or waterworks serving a population of less than 5000).

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 Fort Qu'Appelle water quality and sample submission compliance record for the January 1, 2023 to December 31, 2023 time period. This report was completed on January 17, 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	52_	52	0
E. coli	0 Organisms/100 mL	52	52	0
Background Bacteria	Less than 200/100 mL	52	52	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			Chlorine (%)	
Chlorine	0.1 mg/L free OR					Į.	
Residual	0.5 mg/L total	_0.68-2.26	0.32-1.80	52	52	100%	

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

		Test Level	# Tests	# Tests Not Meeting	
Parameter	Limit (mg/L)	Range	Performed	Requirements	
Free Chlorine Residual	at least 0.1	0.41-2.08	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	0.05-0.89	0	0.89	730	730

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 (*insert date*). Sample results indicated that the provincial drinking water quality standards were not exceeded. (*Use this one if review indicates that there were no exceedences*). (OR) Samples exceeded provincial water quality standards for the following parameters: (*Use only the applicable portions of table below for which values have been exceeded*).





Parameter	Limit MAC(mg/L)		Sample Result(s)	# Samples Exceeding L	_imit	
Arsenic	0.010		<u> </u>	~	* Results expressed	
Barium	1.0				as average values	
Boron		5.0			for communities or	
Bromate	0.01				waterworks that	
Cadmium	0.005			-	fluoridate drinking	
Chlorate	1.0				water supplies or	
Chlorite	1.0			2	those with elevated	
Chromium	0.05				concentrations of	
Fluoride (avg*)	1.5				fluoride or nitrates.	
Lead	0.01					
Nitrate (avg.*)	45.0					
Seleniuum	0.01					
Uranium	0.02				 3	
Chemical - Trih	alomethanes (1	THMs)and Haloacetic	Acids (HAAs)			
Parameter	THMs	Sample	# Samples		# Samples	
	Limit (mg/L)	Result (average)	Required		Submitted	
Trihalomethanes	0.1	*	4 (1 every 3	months)		
Haloacetic Acids	0.08		4 (1 every 3	months)		

Note: Only water supplies derived from surface water or groundwater under the influence of surface water are required to monitor for THMs and HAAs. Waterworks using groundwater sources beyond the influence of surface water do not need to report THMs or HAAs since sampling/analysis will not likely have been performed unless otherwise noted in the waterworks permit to operate

General Chemical

Ochiciai Onomi	Aesthetic	Sample Results	# Samples	# Samples
Parameter	Objectives * (mg/L)	(average)	Required	Submitted
Alkalinity	500			
Bicarbonate	No Objective			
Calcium	No Objective			
Carbonate	No Objective			
Chloride	250			×
Conductivity	No Objective			
Hardness	800			
Magnesium	200			
PH	No Objective			
Sodium	300			
Sulphate	500			
Total dissolved	000			
Solids	1500			

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 (insert year required) and submitted on (insert date) (use this statement if a groundwater supply). The last sets of quarterly samples for General Chemical analysis were required on (insert year or sample submission period required) and were submitted on (insert dates) (use this statement if a surface source or blended source). Sample results indicated that there were no exceedences of the provincial aesthetic objectives for the General Chemical category (use this statement if there were no exceedences). (OR) Samples exceeded provincial aesthetic objectives for the General Chemical category for the following parameters: (use only the applicable portions of the table below for which values have been exceeded).

*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/Village/Hamlet/Rural Municipality/Owner Name and Title

Postal Address

Telephone Number / Facsimile Number (if available)

E-mail address (if available)

June 2015

EPB 536D







Roy Romanow Provincial Laboratory **Environmental Services**

5 Research Drive Regina, Saskatchewan S4S 0A4

(306) 787-7138 / (306) 787-3140

Environmental Services Analysis Report - Final

Invoice Number:

1165804

Sample Location:

Water Treatment Plant

Collected by: Station #:

Ryan Gallinger SK05JL0004

D----4

Permit: 2189

FORT QU'APPELLE DIST.SYSTEM

Collected Date: Received:

14-Feb-2023 3:15 PM 15-Feb-2023 9:40 AM

Reported: Water Source: 21-Feb-2023 3:04 PM

Distributed

Submitted By:

Amaluaia

FORT QU APPELLE TOWN OF

BOX 309

136 BOUNDARY AVE. S. FORT QU APPELLE, SK

S0G 1S0

Invoice:

FORT QU APPELLE TOWN OF

Caala Cuidalina

BOX 309

136 BOUNDARY AVE. S. FORT QU APPELLE, SK

S0G 1S0

11-14

Test

Analysis	Result	Unit	Sask Guideline	Comment	Fee
Health and Toxicity Panel					92.50
Boron	0.1	mg/L	< 5.0		
Aluminum (ICPMS)	<6.96	μg/L	No Guideline		
Arsenic (ICPMS)	0.20	μg/L	< 10		
Barium (ICPMS)	13.2	μg/L	< 1000		
Cadmium (ICPMS)	<0.15	μg/L	< 5		
Chromium (ICPMS)	<0.19	μg/L	< 50		
Copper (ICPMS)	15.7	μg/L	< 1000		
Lead (ICPMS)	0.10	μg/L	< 10		
Selenium (ICPMS)	4.7	μg/L	< 10		
Uranium (ICPMS)	8.5	μg/L	< 20		
Zinc (ICPMS)	4.9	μg/L	< 5000		
Antimony (ICPMS)	<0.16	μg/L	No Guideline		
Silver (ICPMS)	<0.20	μg/L	No Guideline		
General Chemistry/Water Quality Panel					104.00
Conductivity	1561	μS/cm	< 2300		
рН	7.7	pH Units	7.0 - 10.5		
Total Alkalinity	328	mg/L CaCO3	< 500		
Phenol Alkalinity	0.00	mg/L CaCO3	No Guideline		
Bicarbonate	400	mg/L	No Guideline		
Carbonate	0	mg/L	No Guideline		
Hydroxide	0	mg/L	No Guideline		
Chloride Dissolved	79.3	mg/L	< 250		
Fluoride Dissolved	0.14	mg/L	< 1.5		
Nitrate Dissolved	6.2	mg/L	< 45		
Sulfate Dissolved	444.1	mg/L	< 500		
Total Hardness (Calculated)	634	mg/L CaCO3	< 800		
Total Dissolved Solids	1281	mg/L	< 1500		
Iron	<0.1	mg/L	< 0.3		
Manganese	< 0.01	mg/L	< 0.05		
Calcium	160	mg/L	No Guideline		
Magnesium	57	mg/L	< 200		
Potassium	12	mg/L	No Guideline		
Sodium	122	mg/L	< 300		