# Drinking Water Quality and Compliance 2021 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 Ponteix water quality and sample submission compliance record for the 2021 time period. This report was completed on May 30, 2022. 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	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							
	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	0.72 - 1.61	0.15 - 0.83_	52	52	100%	

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

_		Test Level	# Tests	# Tests Not Meeting
Parameter	Limit (mg/L)	Range	Performed	Requirements
Free Chlorine Residual	at least 0.5	50 - 1.89_	<u>365</u>	0

A minimum of 0.5 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	0.3	0.029-0.079	0	0.079	730	730

#### Chemical – Health Category

All waterworks serving less than 5000 persons are required to submit water samples for WSA's Chemical Health category once a year. 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 January 15, 2021. 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		_0.0014	0	* Results expressed
Barium	1.0		_0.0066	<u>0</u>	_ as average values
Boron		5.0	_0.30	0	for communities or
Cadmium	0.005		_0 <u>.00001</u>	0	waterworks that fluoridate drinking water supplies or those with elevated
Chromium	0.05		_0.0005	0	concentrations of fluoride or nitrates.
Lead	0.01		_0.0001	0	
Seleniuum	0.01		_0.0001	0	
Uranium	0.02		0.017	0	_

Chemical - Trihalomethanes (THMs)and Haloacetic Acids (HAAs)

Parameter	THMs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1	0.0867	4 (1 every 3 months)	<u>4</u>
Haloacetic Acids	0.08	0.0355	4 (1 every 3 months)	4

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**

Parameter	 Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	<u>436</u>	1	1
Bicarbonate	No Objective	532	1	1
Calcium	No Objective	226	1	1
Carbonate	No Objective	0	1	1
Chloride	250	41.9	1	1
Conductivity	No Objective	3824	1	1
Hardness	800	1071	<u>1</u>	1
Magnesium	200	123	1	1
PH	No Objective	7.4	1	1
Sodium	300	<u></u> 716	<u>1</u>	1
Sulphate Total dissolved	500	<u>1789.5</u>		
Solids	1500	3445	1	1

All waterworks serving less than 5000 persons are required to submit water samples for WSA's General Chemical category once a year as noted in the waterworks permit to operate. 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 in 2021 and submitted on April 19, 2021. Samples exceeded provincial aesthetic objectives for the General Chemical category for the following parameters: *Hardness, Sodium, 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 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:

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