## Drinking Water Quality and Compliance 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 Oxbow water quality and sample submission compliance record for the 2021 time period. This report was completed on May 29, 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: <a href="http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index\_e.html">http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index\_e.html</a>.

# 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	N/A	N/A	N/A	

### Water Disinfection

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	_53 - 3.31	08 – 2.49_	52	52	
Free Chlorine Residual - Water Entering Distribution System from -From Treatment Plant Records						
			Test Level	# Tests	# Tes	sts Not Meeting

Parameter	Limit (mg/L)	Test Level Range	# Tests Performed	# Tests Not Meeting Requirements	
Free Chlorine Residual	at least 0.1	11 – 6.03_	703	0	

# Turbidity – From Water Treatment Plant Records

Parameter	Limit	Test Level # Tests	# Tests Not Meeting	Maximum	# Tests	# Tests
	(NTU) Performed	Range	Requirements	Turbidity (NTU)	Required	Performed
Turbidity	30	0359_	4	30	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 October 5, 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		0.30_ug/L	0	*
Barium	1.0		_ 46.1_ug/L_	0	
Boron		5.0	0.3	0	
Bromate	0.01			0	



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Cadmium	0.005	0.15_ug/L0
Chlorate	1.0	0
Chlorite	1.0	0
Chromium	0.05	0.19_ug/L0
Fluoride (avg*)	1.5	0.200
Lead	0.01	0.07_ug/L0
Nitrate (avg.*)	45.0	0.20
Selenium	0.01	1.13_ug/L0
Uranium	0.02	2.5ug/L0

Chemical – Trihalomethanes (THMs)and Haleoacetic Acids (HAAs)						
Parameter	THMs	Sample	# Samples	# Samples		
	Limit (mg/L)	Result (average)	Required	Submitted		
Trihalomethanes	0.1	134.67_ug/L_	_ 4 (1 every 3 months)	3		
Haleoacetic Acids	0.08	89.4 ug/L	_ 4 (1 every 3 months)	3		

Note: Only water supplies derived from surface water or groundwater under the influence of surface water are required to monitor for THMs and HAAs.

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	#Samples Required	#Samples Submitted
Alkalinity	500	_386.5	4	4
Bicarbonate	No Objective	_471.75	4	4
Calcium	No Objective	_124	4	4
Carbonate	No Objective	_0	4	4
Chloride	250	_84.95	4	4
Conductivity	No Objective	_1607.75	4	4
Hardness	800	_517.5	4	4
Magnesium	200	_50.5	4	4
PH	No Objective	_7.575	4	4
Sodium	300	_187	4	4
Sulphate Total dissolved	500	_389.8	4	4
Solids	1500	_1318.5	4	4

The last sets of quarterly samples for General Chemical analysis were required in 2021 and were submitted on October 13/ 2020. Sample results indicated that there were no exceedances of the provincial aesthetic objectives for the General Chemical category

### More information on water quality and sample submission performance may be obtained from:

Town of Oxbow PO Box149 306-483-\*2300 reception@oxbow.ca



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