

Town of Eston 2020 Drinking Water Quality and Compliance 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 the Permit to Operate a waterworks. The following is a summary of the **Town of Eston** water quality and sample submission compliance record for the 2020 period. This report was completed on 02/23/2021. 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, 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	9
Background Bacteria	Less than 200/100 mL	52	52	0	

Water Disinfection -

Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples

Parameter	Minimum	Total Chlorine	Free Chlorine	# Tests	# Tests	# Adequate
	Limit	Residual Range	Residual Range	Required	Submitted	Chlorine (%)
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	0.33-1.91	0.13-1.43	52	52	100%

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

Parameter	Limit (mg/L)	Test Level Range	# Tests# Performed	Tests Not Meeting Requirements	
Free Chlorine Residual	at least 0.1	0.11-4.95 365	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.

<u>Turbidity - From Water Treatment Plant Records</u>

Parameter	Limit	Test Level	# Tests Not Meeting	Maximum	# Tests	# Tests
	(NTU)	Range	Requirements	Turbidity (NTU)	Required	Performed
Turbidity	1.00	0.11-2.95	11	2.95	365	365

Chemical - Health Category

All waterworks serving less than 5,000 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 in 2019. Sample results indicated that the provincial drinking water quality standards were not exceeded. Samples will be taken again in 2021.

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Result(s)	# Samples Exceeding Limit	
Arsenic	0.010		0.0011	0	
Barium	1.0		0.059	0	
Boron		5.0	0.10	0	
Cadmium	0.005		0.00001	0	
Chromium	0.05		0.00005	0	
Fluoride (avg*)	1.5		0.183	0	
Lead	0.01		0.0001	0	19
Nitrate (avg.*)	45.0		0.4775	0	
Selenium	0.01		0.0002	Ö	
Uranium	0.02		0.0023	Ō	

Chemical - Trihalomethanes (THMs)

Parameter	THMs Limit (mg/L)	Sample Average	# Samples Result (average)	# Samples Required Submitted	
Trihalomethanes	100	30.07	4 (1 every 3 months)	4	
Haloacetic Acids	80	14.25	4 (1 every 3 months)	4	

General Chemical

All waterworks serving less than 5,000 persons are required to submit water samples for SE's General Chemical once per three months every second year if a surface water source.

The last sets of quarterly samples for General Chemical analysis were required and were submitted in 2019. Samples will be taken again in 2021.

Parameter	Aesthetic Objectives (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	185	4	4
Bicarbonate	No Objective	226	4	4
Calcium	No Objective	58	4	4
Carbonate	No Objective	0	4	4
Chloride	250	21	4	4
Conductivity	No Objective	675	4	4
Hardness	800	254	4	4
Magnesium	200	27	4	4
PH	No Objective	7.8	4	4
Sodium	300	46	4	4
Sulphate	500	140	4	4
Total Dissolved Solids	1500	496	-	•

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

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