

Town of Eston 2022 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 2022 period. This report was completed on 06/22/2021. 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: <u>http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index_e.html</u>.

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

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	0.40-1.44	0.25-1.18	52	52	100%

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 0.1	0.12-1.87	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 (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed	
Turbidity	1.00	0.10-1.51	19	1.51	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 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 in 2022. Sample results indicated that the provincial drinking water quality standards were not exceeded. Samples will be taken again in 2023.

Parameter	Limit MAC(mg/L)	Sample Result(s)	# Samples Exceeding Limit	
Arsenic	0.01	0.0007	0	
Aluminum	No Limit	0.0509	0	
Barium	1.0	0.0632	0	
Boron	5.0	0.01	0	
Cadmium	0.005	0.00015	0	
Chromium	0.05	0.00019	0	
Copper	1.0	0.00829	0	
Iron	0.3	0.01	0	
Lead	0.01	0.00007	0	
Manganese	0.05	0.01	0	
Selenium	0.01	0.00113	0	
Uranium	0.02	0.0002	0	
Zinc	5	0.004	0	

Chemical – Trihalomethanes (THMs)

Parameter	THMs	Sample	# Samples	# Samples
	Limit (mg/L)	Average	Result (average)	Required Submitted
Trihalomethanes	100	75.6	4 (1 every 3 months)	4
Haloacetic Acids	80	50.0	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 year.

Parameter	Aesthetic Objectives (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Conductivity	2.3	0.686	1	1
pH	7.0-10.5	7.9	1	1
Total Alkalinity	500	199	1	1
Phenol Alkalinity	No Limit	0	1	1
Bicarbonate	No Limit	243	1	1
Carbonate	No Limit	0	1	1
Hydroxide	No Limit	0	1	1
Chloride Dissolved	250	22.8	1	1
Fluoride Dissolved	1.5	0.16	1	1
Nitrate Dissolved	45	0.60	1	1
Sulfate Dissolved	500	121.3	1	1
Total Hardness	800	274	1	1
Total Dissolved Solids	1500	528	1	1
Iron	0.03	0.01	1	1
Manganese	0.05	0.010	1	1
Calcium	No Limit	62	1	1
Magnesium	200	29	1	1
Potassium	No Limit	4	1	1
Sodium	300	45	1	1

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

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