



**Drinking Water Quality and Compliance
Annual Notice to Consumers
Town of Eston**

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 2016 time period. This report was completed on 06/30/2017. 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	54	0
E. coli	0 Organisms/100 mL	52	54	0
Background Bacteria	Less than 200/100 mL	52	54	0

Water Disinfection –

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

Parameter	Minimum Limit	Total Chlorine Residual Range	Free Chlorine Residual Range	# Tests Required	# Tests Submitted	# Adequate Chlorine (%)
Chlorine	0.1 mg/L free OR					
Residual	0.5 mg/L total	0.32-1.68	0.12-1.15	52	54	0

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	0.11-1.73	781	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	0.30	0.11-1.98	6	0.39	52	54

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 2015. 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		0.0006	0	* Results expressed as average values for communities or waterworks that fluoridate drinking water supplies or those with elevated concentrations of fluoride or nitrates.
Barium	1.0		0.0612	0	
Boron		5.0	0.0002	0	
Cadmium	0.005		0.00003	0	
Chromium	0.05		0.00003	0	
Fluoride (avg*)	1.5		0.22	0	
Lead	0.01		0.0001	0	
Nitrate (avg.*)	45.0		0.4	0	
Selenium	0.01		0.00096	0	
Uranium	0.02		0.004	0	

Chemical – Trihalomethanes (THMs)

Parameter	THMs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1	60	4 (1 every 3 months)	4
Haloacetic Acids	0.80	22	4 (1 every 3 months)	4

General Chemical

All waterworks serving less than 5000 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 on (insert year or sample submission period required) and were submitted on 2015.

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	216	3	3
Bicarbonate	No Objective	264	3	3
Calcium	No Objective	83	3	3
Carbonate	No Objective	0	3	3
Chloride	250	35.1	3	3
Conductivity	No Objective	1088	3	3
Hardness	800	401	3	3
Magnesium	200	0.01	3	3
PH	No Objective	7.8	3	3
Sodium	300	95	3	3
Sulphate	500	326.7	3	3
Total dissolved Solids	1500	854	3	3

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

Town of Eston
contact@eston.ca