



**Drinking Water Quality and Compliance
Town of Coronach Station # SK11AE0001**

Annual Notice to Consumers YEAR: 2021

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 Coronach's water quality and sample submission compliance record for January 1 - December 31st, 2021. This report was completed on March 17th, 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. 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		Regular Samples	Regular Samples	# of Positive Regular
Parameter/ Location	Limit	Required	Submitted	Submitted (Percentage)
Total Coliform	0 Organisms /100 mg/L	52	64	0
E. coli	0 Organisms /100 ml	52	64	0
Background Bacteria	Less than 200 Organisms/100 mL	N/A	0	0

The owner/operator is responsible to ensure that 100 per cent of all bacteriological samples are submitted as required. All waterworks are required to submit samples for bacteriological water quality, the frequency of monitoring depends on the population served by the waterworks.

Water Disinfection

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

	Minimum	Free Chlorine	# Tests	# Tests	# Adequate
Parameter	Limit (mg/L)	Residual Range	Required	Submitted	Chlorine (Percentage)
Free Chlorine	0.1 mg/L free	0.20-1.91	52	52	100%
Chlorine Total Residual	0.5 mg/L total	0.39-2.634	52	52	100%

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual OR 0.5 mg/L total chlorine residual is required at all times throughout the distribution system unless otherwise approved. A proper chlorine submission is defined as a bacteriological sample submission form with both the free and total chlorine residual fields filled out. An adequate chlorine is a result that indicates that the chlorine level is above the regulated minimums. An adequate chlorine may be counted even if the chlorine results were submitted incorrectly. A waterworks is required to submit chlorine residual test results on every bacteriological sample they submit.

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	0.15 - 2.40	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.

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Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed
Turbidity	1	0.05 - 0.49	0	0.49	365	365

Turbidity is a measure of water treatment efficiency. Turbidity measures the “clarity” of the drinking water and is generally reported in Nephelometric Turbidity Units (NTU). All waterworks are required to monitor turbidity at the water treatment plant. The frequency of measurement varies from daily for small systems to continuous for larger waterworks.

Chemical – Health Category

Parameter	Limit MAC (mg/L)	Limit IMAC (mg/L)	Sample Results	# Samples Exceeding MAC/IMAC	# Samples Required	# Samples Submitted
Arsenic	0.01		0.00012	0	1	1
Barium	1		0.0142	0	1	1
Boron		5	1.62	0	1	1
Cadmium	0.005		<0.000050	0	1	1
Chromium	0.05		<0.00050	0	1	1
Fluoride (avg.*)	1.5		0.323	0	1	1
Lead	0.01		0.00008	0	1	1
Nitrate (avg.*)	45		<0.050	0	1	1
Selenium	0.01		<0.000050	0	1	1
Uranium	0.02		<0.000010	0	1	1

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.

General Chemical	Aesthetic Objectives* (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	540	1	1
Bicarbonate	No Objective	659	1	1
Calcium	No Objective	82.9	1	1
Carbonate	No Objective	<1.0	1	1
Chloride	250	17	1	1
Conductivity	No Objective	1450	1	1
Hardness	800	478	1	1
Magnesium	200	56.5	1	1
PH	No Objective	7.76	1	1
Sodium	300	186	1	1
Sulphate	500	267	1	1
Total dissolved solids	1500	980	1	1

All waterworks serving less than 5000 persons are required to submit water samples for SE’s General Chemical category once every two years if a ground water source. The General Chemical category includes analysis for alkalinity, bicarbonate, calcium, carbonate, chloride, conductivity, hardness (as CaCO₃), magnesium, sodium, sulphate and total dissolved solids.

The last sample for General Chemical analysis was required on 2022 and submitted on February 7th, 2022. Sample results indicated that there were no exceedences of the provincial aesthetic objectives for the General Chemical category.

*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 CaCO₃, 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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1-306-267-2150
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