Town Of Blaine Lake Drinking Water Quality and Compliance Annual Notice to Consumers for 2020

Introduction

Saskatchewan Environment (SE) 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 Blaine Lake water quality and sample submission compliance record for the January 1 – December 31, 2020 time period. This report was completed in August 2021. Readers should refer to SE's "Municipal Drinking Water Quality Monitoring Guidelines, November 2002, EPB 202" 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/hecs-sesc/water/dwgsup.htm.

Water Quality Standards Bacteriological Quality

Parameter/Location Limit	Regular Samples Required	Regular Samples Submitted	# of Positive Regular Submitted (%)
Total Coliform and 0 Organisms/100 ml	52	52	0
Background Bacteria Less than 200/100 MI			

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	.85 – 1.85	.42 – 1.21	52	52	100%

Water Disinfection - Free Chlorine Residual for Water Entering Distribution System from Waterworks Records-From Water

Treatment Plant Records					
		Test Level	# Tests	# Tests Not Meeting	
Parameter	Limit (mg/L)	Range	Performed	Requirements	
Free Chlorine Residual	at least 0.1	.31 – .67	365	0	

Turbidity -	From	Water	Treatment	Plant	Records
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Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed	
Turbidity	less than 1.0	.10 – .84	0	No standard set	365	365	

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 in Jan 2021. Sample results indicated that no drinking water quality standards were exceeded.

General Chemical

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 and once per three months every second year if a surface water or blended surface/groundwater 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 in 2020 and submitted on January 20, 2021 Samples exceeded provincial aesthetic objectives for the General Chemical category for the following parameters:

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)Required	# Samples Submitted	# Samples
Hardness	800	822	1	1
Sulphate	500	650	1	1

^{*}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:

Town of Blaine Lake Box 10, Blaine Lake Sk S0J 0J0 Phone (306)-497-2531; blainelake @sasktel.net