

Drinking Water Quality and Compliance Annual Notice to Consumers

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 **Northern Village of Green Lake** water quality and sample submission compliance record for the **January 1, 2016-December 31, 2016** time period. This report was completed on **January 11, 2017**. 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/ewh-semt/pubs/water-eau/index-eng.php>

1. Water Quality Standards Bacteriological Quality

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

2. 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 Submitted	# Adequate Chlorine (%)
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	0.61 - 2.14	0.38 - 1.96	52	100%

3. 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	0.29 - 2.20	365	0

A minimum of 0.1 milligrams per liter (mg/L) free chlorine residual is required for water entering the distribution system.

4. Turbidity – From Water Treatment Plant Records

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed
Turbidity	1.0	0.05 - 0.52	0	0.05	365	365

5. 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 **August 4, 2015**. Sample results indicated that the provincial drinking water quality standards were not exceeded.

6. 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. 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 submitted on **August 4, 2015**. Samples exceeded provincial aesthetic objectives for the General Chemical category for the following parameters:

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Sodium	300	396	1	1
Alkalinity	500	548	1	1

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

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