Drinking Water Quality and Compliance
Annual Notice to Consumers of Maple Creek
2007

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Saskatchewan 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 Maple Creek's water quality and sample submission compliance record for the 2007 calendar year time period. **This report was completed on April 30, 2008.** Readers should refer to Saskatchewan Environment's "Municipal Drinking Water Quality Monitoring Guidelines, November 2002, EPB 202" 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/ehp/ehd/cata1ogue/bch_pubs/dwgsup doc/dwgsup doc.htm.

Water Quality Standards
Bacteriological Quality

Parameter/Location	Limit	Regular Samples Required	Regular Samples Submitted (Percentage)	# of Positive Regular Submitted (Percentage)
Total Coliform and Background Bacteria	0 Organisms/100 mg/L <200 Organisms/100 mL	**52**	**52**	**0**

The owner/operator is responsible to ensure that one hundred percent 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

Parameter	Minimum Limit (mg/L)	Free Chlorine Residual Range	Total Chlorine Residual Range	# Tests Required	# of Adequate Chlorine Samples(%)	# of Inadequate Chlorine Samples
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	**0.50 - 1.60 mg/l**	**0.60 - 1.75 mg/l**	**52**	**52**	**0**

A minimum of 0.1 milligrams per liter (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. Adequate chlorine is a result that indicates that the chlorine level is above the regulated minimums. 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.

General Chemical

Samples Required	Samples Submitted	Date of Last Sample(s)
1	1	February 2008

The community's waterworks is required to submit 1 sample(s) every second year. If the community relies on ground water the community has a minimum of 12 months and a maximum of 24 months from the date of the last sample to submit the next sample. The general chemical sample tests for a range of parameters such as hardness and alkalinity. The results of these tests show the aesthetic quality of your drinking water.

Health and Toxicity Analysis

Samples Required	Samples Submitted	Date of Last Sample
1	1	February 2008

All waterworks serving less than 5000 persons are required to submit one water sample for Saskatchewan Environment's "Health and Toxicity" category once every 2 years. This category includes analysis for arsenic, barium, boron, cadmium, chromium, fluoride, lead, nitrate, selenium and uranium. Sample results indicated that the provincial drinking water quality standards were not exceeded.

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		**0.60 -1.50 mg/l**	**365**	**0**

A minimum of 0.1 milligrams per liter (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	**<0.1**	**0.032 - 0.070**	**0**	**<.3**	**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.

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

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