

Drinking Water Quality and Compliance Town Short Form – A Template for Annual Notice to Consumers

(Note: This short form may be used for communities or waterworks serving a population of less than 5000).

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 are required by a Minister's Order or Permit to Operate a waterworks. The following is a summary of the Village of Landis water quality and sample submission compliance record for the January 01, 2009 to December 31, 2009 time period. This report was completed on May 11, 2010. 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 Background Bacteria	0 Organisms/100ml Less than 200/100ml	26	23	0.00

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	#Test Submitted	#Adequate Chlorine (%)
Chlorine Residual	0.1mg/L free OR 0.5mg/L total	0.23 to 3.09	0.23 to 1.21	26	25	100 %

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	0.1 to 0.26	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.

General Chemical

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Required	#Samples Submitted
Alkalinity	500	386		
Bicarbonate	No Objective	471		
Calcium	No Objective	34		
Carbonate	No Objective	0		
Chloride	250	78.8		
Conductivity	<2300	2846		
Fluoride Dissolved	< 1.5	0.14		
Hardness	800	126		
Magnesium	< 200	10		
Nitrate Dissolved	< 45	< 0.2		
PH	6.5 – 9.0	8.1		

Potassium	No Objective	5
Sodium	300	630
Sulfate	< 500	986.8
Total Dissolved Solids	1500	2216

These are the results from the water sample send in May 27, 2009.

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 submitted on May 27, 2009 by the Village. A general sample was taken and tested by Trans-Gas May 18, 2007.

*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 anesthetic 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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