Town of Tisdale

2023 Drinking Water Quality and Compliance Annual Notice to Consumers

Introduction

Saskatchewan 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 Tisdale** water quality and sample submission compliance record for the **January 1 to December 31, 2023** *time period. This report was completed on* **April 29, 2024.** Readers should refer to Environment'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_e.html

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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/100 mL Less than 200/100 mL	52	51	0 (0.0%)

- *1 sample not submitted due to lab closure at holiday season*

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	# Tests Submitted	# Adequate Chlorine (%)
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	0.53 – 0.83	0.48 – 0.79	52	51	51 (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	0.40 – 1.16	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.

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 – 0.21	0	0.21	365	365

Turbidity is a measure of water treatment efficiency. Turbidity measures "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

All waterworks serving less than 5000 persons are required to submit water samples for SE's Chemical Health category once every 2 years.

The last sample for Chemical Health analysis was submitted on August 23, 2023*. Sample results indica*ted that the provincial drinking water quality standards were not exceeded.

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Result(s)	# Samples Exceeding Limit	
Arsenic	0.025		0.0019	0	
Barium	1.0		<0.0005	0	
Boron		5.0	0.12	0	
Cadmium	0.005		0.00001	0	
Chromium	0.05		<0.0005	0	
Fluoride (*)	1.5			0	*(0.75 – 1.07 at WTP)*
Lead	0.01		<0.0001	0	
Nitrate	45.0			0	
Seleniuum	0.01		<0.0001	0	
Uranium	0.02		<0.0001	0	

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.

The last sample for General Chemical analysis was submitted on December 14, 2022*. Sample results indica*ted that the provincial drinking water quality standards were not exceeded.

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Exceeding Limit	
Alkalinity	500	112	1	
Bicarbonate	No Objective	134	1	
Calcium	No Objective	8.9	1	
Carbonate	No Objective	1	1	
Chloride	250	5.2	1	
Conductivity	No Objective	263	1	
Hardness	800	34	1	
Magnesium	200	3.0	1	
PH	No Objective	8.41	1	(7.03 – 8.82 at WTP)
Sodium	300	46	1	
Sulphate	500	17	1	
Total dissolved Solids	1500	156	1	

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

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