

### Drinking Water Quality and Compliance For Sask. Valley Rural Water Utility 2024 Annual Notice to Consumers

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

#### Introduction

The Water Security Agency (WSA) 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 Permit to Operate a waterworks. The following is a summary of the Sask. Valley Rural Water Utility Gruenthal water quality and sample submission compliance record for the Jan.1st to Dec.31st 2024 time period. This report was completed on January 8, 2025. Readers should refer to the Agency'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 Agency'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: <a href="http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index\_e.html">http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index\_e.html</a>.

## 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			
Background Bacteria	Less than 200/100 mL	24	26	0.0%

# Water Disinfection -

Chlorine Re	Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples						
	Minimum	Total Chlorine	Free Chlorine	# Tests	# Tests	# Adequate	
Parameter	Limit	Residual Range	Residual Range	Required	Submitted	Chlorine (%)	
Chlorine	0.1 mg/L free OR						
Residual	0.5 mg/L total	1.21 to 1.88	NA	24	26	100%	

#### Water Disinfection – Total 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
Total Chlorine Residual	at least 0.5	0.98 to 1.96	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. Water is supplied by the City of Saskatoon and is chloraminated so there is rarely a free chlorine residual. The system operates on total chlorine residual.

#### <u>Turbidity - From Water Treatment Plant Records</u>

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed	
Turbidity	1.0	0.09 to 0.23	0	0.23	24	26	

#### Chemical - Health Category

All waterworks serving less than 5000 persons are required to submit water samples for WSA'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.

<sup>\*</sup> Water is supplied by the City of Saskatoon. Results from these tests can be seen at www.saskatoon.ca

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Result(s)	# Samples Exceeding Limit	
Arsenic	0.010				* Results expressed
Barium	1.0				_ as average values
Boron		5.0			for communities or
Cadmium	0.005				waterworks that
Chromium	0.05				fluoridate drinking
Fluoride (avg*)	1.5				water supplies or
Lead	0.01				those with elevated
Nitrate (avg.*)	45.0				concentrations of
Selenium	0.01				fluoride or nitrates.
Uranium	0.02				-

Chemical - Trihalomethanes (THMs)

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Parameter	THMs	Sample	# Samples	# Samples		
	Limit (mg/L)	Result (average)	Required	Submitted		
Trihalomethanes	0.1	0.0311	4	4		
Haloacetic Acids	0.080	0.0193	4	4		

THMs and Haloacetic Acids are generated during the water disinfection process as a by-product of reactions between chlorine and organic material. THMs are generally found only in drinking water obtained from surface water supplies. THMs and HAAs are to be monitored on a quarterly basis and the IMAC result is expressed as an average of 4 quarterly samples. Only water supplies derived from surface water or groundwater under the influence of surface water are required to monitor for THMs and Haloacetic Acids unless otherwise specified in the facility Permit to Operate.

#### **General Chemical**

<u>General Gnerilical</u>							
	Aesthetic	Sample Results	•	# Samples			
Parameter	Objectives * (mg/L)	(average)	Required	Submitted			
Alkalinity	500						
Bicarbonate	No Objective						
Calcium	No Objective						
Carbonate	No Objective						
Chloride	250 <sup>°</sup>						
Conductivity	No Objective						
Hardness	800						
Magnesium	200						
PH	No Objective						
Sodium	300						
Sulphate	500						
Total dissolved							
Solids	1500						

All waterworks serving less than 5000 persons are required to submit water samples for WSA'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 CaCO<sub>3</sub>), magnesium, sodium, sulphate and total dissolved solids.

\*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 CaCO<sub>3</sub>, 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:

Sask. Valley Rural Water Utility Box 126 Rosthern Sask. S0K 3R0 Call 306-232-4393 rm403Office@sasktel.net

<sup>\*</sup>Water is supplied by the City of Saskatoon. Results from these tests can be seen at www.saskatoon.ca