

Drinking Water Quality and Compliance <u>SaskWater – Saskatoon Potable Water Supply System - North</u> Station Number – SK05HH0025 2023 Notification to Consumers

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 SaskWater – Saskatoon Potable Water Supply System - North water quality and sample submission compliance record for the <u>January 1, 2023, to December 31, 2023, time period.</u> This report was completed on February 1, 2024. Readers should refer to the WSA's <u>Municipal Drinking Water Quality Monitoring Guidelines</u> for more information on minimum sample submission requirements and types of samples. Permit requirements for a specific waterworks may require more sampling than outlined in the Agency's monitoring guidelines. This system is supplied with water by the City of Saskatoon. If consumers need to know more about drinking water in Saskatchewan, more detailed information is available from: http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index-eng.php.

BACTERIOLOGICAL QUALITY

Parameter	Limit	Regular Samples Required	# of Samples Submitted	# of Positive Regular Submitted
Total Coliform	0 Organisms/100mL	208	208	0
E. Coli	0 Organisms/100m/L	208	208	0
Background Bacteria	Less than 200/100mL	208	208	0

Analysis is performed on a single sample for all parameters mentioned above. 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 for Water in the Distribution System – From Test Results Submitted with Bacteriological Samples

Parameter	Minimum Limit (either/or)	Range (mg/L)	Average (mg/L)	# Tests Required	# Tests Submitted	# Adequate Chlorine
Total Chlorine	0.50 mg/L	1.49 - 1.97	1.74	208	208	208

A minimum of 0.50 mg/L total chlorine residual is required at all times throughout the distribution system. An adequate chlorine residual is a result that indicates that the chlorine level is above the regulated minimum. A waterworks is required to submit chlorine residual test results on every bacteriological sample they submit.

Total Chlorine Residual for Water entering the Distribution System

Minimum		Average	# Tests	# Tests	% Adequate	
Parameter	Limit (mg/L)	Range (mg/L)	(mg/L)	Required	Performed	Chlorine
Total Chlorine	0.50	1.38 - 2.45	1.80	Continuous	Continuous	100

Total chlorine residuals are continuously monitored and recorded.

Saskatoon North Treated Water Supply System

TURBIDITY

Turbidity for Water in the Distribution System - From Test Results Submitted with Bacteriological Samples

		Range	Average	# Tests	# Tests	# Exceeding
Parameter	Limit (NTU)	(NTŪ)	(NTU)	Required	Performed	Limit
Turbidity	No Standard	0.06 - 0.87	0.15	208	208	0

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). The turbidity is tested at the same frequency as the bacteriological testing with a bench testing instrument.

CHEMICAL - TRIHALOMETHANES (THM)

SaskWater is not required to perform this testing in 2023 as part of the operating permit. The next testing is required in 2024. The 2021 results are shown below for informational purposes.

Trihalomethanes are formed when chlorine reacts with organic matter in water. The four THM compounds are: chloroform, dibromochloromethane, bromodichloromethane (BCDM) and bromoform. The sum of the concentrations of these four components is referred to as Total Trihalomethanes. The limit for THM is a long-term objective based on an annual average of seasonal samples.

	Maximum Limit	2021 Average	# Samples Required	# Samples Submitted
Parameter	(mg/L)	(mg/L)	(2023)	(2023)
Total Trihalomethanes	0.100	0.036	0	0

CHEMICAL - HALOACETIC ACIDS (HAAs)

SaskWater is not required to perform this testing in 2023 as part of the operating permit. The next testing is required in 2024. The 2021 results are shown below for informational purposes.

Haloacetic acids are formed when chlorine reacts with organic matter in water. The five regulated haloacetic acids are: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid. The sum of the concentrations of these five components is referred to as HAA5. The limit for HAA5 is a long-term objective based on an annual average of seasonal samples.

Bt.	Maximum Limit	2021 Average	# Samples Required	# Samples Submitted	
Parameter	(mg/L)	(mg/L)	(2023)	(2023)	
Haloacetic Acids 5	0.080	0.024	0	0	

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

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