

# **Drinking Water Quality and Compliance** SaskWater - Saskatoon Non-Potable Pipeline(s) Station Number – SK05HG0399 **2022 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 Non-Potable Pipeline(s) water quality and sample submission compliance record for the January 1, 2022 to December 31, 2022 time period. This report was completed on March 24, 2023. Readers should refer to the WSA's Municipal Drinking Water Quality Monitoring Guidelines 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. 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**

#### Sampling from Distribution System

Parameter	Limit	Regular Samples Required	Regular Samples Submitted	# Of Positive Regular Submitted
Total Coliform	0 Organisms/100mL	24	27	27
E. Coli	0 Organisms/100m/L	24	27	25
Background Bacteria	Less than 200/100mL	24	27	27

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. Additional testing was done for informational purposes.

### **TURBIDITY**

Turbidity in the Distribution System – From Test Results Submitted with Bacteriological Samples

		Range	Average	# Tests	# Tests	# Exceeding
Parameter	Limit (NTU)	(NTU)	(NTU)	Required	Performed	Limit
Turbidity	No Standard	1.32 - 9.16	4.51	24	27	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. Additional testing was done for informational purposes.

## CHEMICAL – HEALTH

The Saskatoon Non-Potable West Pipeline is required to submit water samples for the WSA's Chemical Health category once every second year. 2022 is a required sampling year. 0----

Parameter	MAC (mg/L)	IMAC (mg/L)	AO* (mg/L)	Sample Results (mg/L)	# of Samples Required	# of Samples Submitted
Aluminum	No	Objective		0.055	1	1
Antimony	0.006			< 0.0002	1	1
Arsenic	0.010			0.0012	1	1
Barium	1.0			0.087	1	1
Boron		5.0		0.02	1	1
Cadmium	0.005			0.00001	1	1
Chromium	0.05			< 0.0005	1	1
Copper			1.0	0.0044	1	1
Iron			0.3	0.050	1	1
Lead	0.01			0.0001	1	1
Manganese			0.05	0.014	1	1
Selenium	0.01			0.0004	1	1
Silver	No	No Objective		<0.00005	1	1
Uranium	0.02			0.0012	1	1
Zinc			5	0.0040	1	1

MAC – Maximum Acceptable Concentrations

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AO - Aesthetic Objective

IMAC - Interim Maximum Acceptable Concentrations

## **CHEMICAL – GENERAL**

The Saskatoon Non-Potable West Pipeline is required to submit water samples for the WSA's General Chemical category once per three months every second year. 2022 is a required sampling year.

			Sample	# of Samples	# of Samples
Parameter	MAC	AO *	Results (mg/L)	Required	Submitted
Total Alkalinity (mg/L)		500	172	4	2
Bicarbonate (mg/L)	No (	Objective	209	4	2
Calcium (mg/L)	No (	Objective	48	4	2
Carbonate (mg/L)	No (	Objective	<1	4	2
Chloride (mg/L)		250	12	4	2
Fluoride (mg/L)	1.5		0.15	4	2
Total Hardness (mg/L)		800	194	4	2
Hydroxide (mg/L)	No (	Objective	<1	4	2
Magnesium (mg/L)		200	18	4	2
Nitrate (mg/L)	45		0.31	4	2
pH (pH units)		7.0 – 10.5	8.25	4	2
Potassium (mg/L)	No (	Objective	3.0	4	2
Sodium (mg/L)		300	25	4	2
Specific Conductivity (µs/cm)	No Objective		486	4	2
Sulphate (mg/L)		500	70	4	2
Sum of Ions	No (	Objective	385	4	2
Total Dissolved Solids (mg/L)		1500	283	4	2

MAC - Maximum Acceptable Concentration

The second and third quarter samples were missed being tested. The EPO was notified.

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

SaskWater 200 - 111 Fairford Street East Moose Jaw SK S6H 1C8 Toll Free: 1-888-230-1111

Fax: 306-694-3207

Email: customerservice@saskwater.com

AO - Aesthetic Objective

<sup>\*</sup>Objectives apply to certain characteristics of or substances found in water for human 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.