## Drinking Water Quality and Compliance Rural Municipality of Hoodoo 2021 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 Rural Municipality of Hoodoo water quality and sample submission compliance record for the <u>January 1, 2021 to December 31, 2021</u> time period. This report was completed on January 31, 2022. 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. If consumers need to know more about drinking water in Saskatchewan, more detailed information is available from: <a href="http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index-eng.php">http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index-eng.php</a>.

## **BACTERIOLOGICAL QUALITY**

(Cudworth Station)

Parameter	Limit	Regular Samples Required	Regular Samples Submitted	# Positive of Regular Submitted
Total Coliform	0 Organisms/100 mL	24	26	0
E. Coli	0 Organisms/100 mL	24	26	0
Background Bacteria	Less than 200/100 mL	24	26	0

#### (Wakaw Station)

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

The sample collected for the week of October 4, 2021 was not analysed due to a lab error. The EPO was notified.

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.

#### WATER DISINFECTION

Chlorine Residual in Distribution System - From Test Results Submitted with Bacteriological Samples

#### (Cudworth Station)

Parameter	Minimum Limit (either/or)	Range (mg/L)	# Tests Required	# Tests Submitted	# Adequate Chlorine
Free Chlorine	0.10 mg/L	0.93 - 1.39	24	26	26
Total Chlorine	0.50 mg/L	1.14 - 1.60	24	26	26

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### (Wakaw Station)

Parameter	Minimum Limit (either/or)	Range (mg/L)	# Tests Required	# Tests Submitted	# Adequate Chlorine
Free Chlorine	0.10 mg/L	0.81 - 1.56	24	26	200
Total Chlorine	0.50 mg/L	0.99 - 1.78	24	26	26

A minimum of 0.10 milligrams per litre (mg/L) free chlorine residual <u>OR</u> 0.50 mg/L total chlorine residual is required at all times throughout the distribution system. An adequate chlorine is a result that indicates that the chlorine level is above the regulated minimums. A waterworks is required to submit chlorine residual test results on every bacteriological sample they submit. Additional testing was done for informational purposes.

#### Chlorine Residual for Water Within a Distribution System

## (Cudworth Station)

Parameter	Minimum Limit (mg/L)	Range (mg/L)	# Tests Required	# Tests Performed	% Adequate Chlorine
Free Chlorine	0.10	0.45 - 1.88	Continuous	Continuous	100

Residuals are monitored continuously by an in-line chlorine analyzer.

#### (Wakaw Station)

Parameter	Minimum Limit (either/or)	Range (mg/L)	# Tests Required	# Tests Performed	% Adequate Chlorine
Free Chlorine	0.10 mg/L	0.81 - 1.63	365	365	205
Total Chlorine	0.50 mg/L	0.99 - 1.93	365	365	365

A minimum of 0.10 milligrams per litre (mg/L) free chlorine residual <u>OR</u> 0.50 mg/L total chlorine residual is required. Tests performed on a daily basis by waterworks operators are recorded in operation records.

### **TURBIDITY**

Turbidity in the Distribution System – From Test Results Submitted with Bacteriological Samples (Cudworth Station)

Parameter	Limit (NTU)	Range (NTU)	# Tests Required	# Tests Performed	# Exceeding Limit
Turbidity	No standard	0.06 - 0.20	24	26	0

Parameter	Limit (NTU)	Range (NTU)	# Tests Required	# Tests Performed	# Exceeding Limit	
Turbidity	No standard	0.06 - 0.19	24	26	0	

Turbidity is a measure of water treatment efficiency. Turbidity measures the "clarity" of the drinking water and is reported in Nephelometric Turbidity Units (NTU). Additional testing was done for informational purposes.

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# **LEAD AND COPPER**

Parameter	Sample Description	Limit	# Tests Required	# Tests Performed	Result (mg/L)
Lead	Leaving Wakaw Potable Water		1	1	0.0001
Copper	Station		1	1	<0.00829
Lead	Leaving Cudworth	No Limit	1	1	0.0001
Copper	Potable Water Station		1	1	<0.00829

The Water Security Agency required one round of initial sampling to be completed between July 1st and August 31st, 2021 to determine if there are concerns related to effects on human health (EPB 202). These samples were taken at various points in the distribution system. At this time there are no limits applied to these sample results.

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

Rural Municipality of Hoodoo P.O. Box 250 Cudworth, SK S0K 1B0 Phone: 306-256-3281