Drinking Water Quality and Compliance <u>Town of Star City</u> 2018 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 Town of Star City water quality and sample submission compliance record for the January 1, 2018 to December 31, 2018 time period. This report was completed on April 18, 2019. Readers should refer to the WSA's Municipal Drinking Water Quality Monitoring Guidelines, October 2012, EPB 202 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

Parameter	Limit	Regular Samples Required	Regular Samples Submitted	# Positive of Regular Submitted
Total Coliform	0 Organisms/100 mL	52	52	0
E. Coli	0 Organisms/100 mL	52	52	0
Background Bacteria	Less than 200/100 mL	52	52	0

Analysis is performed on a single sample for all parameters mentioned above. All waterworks are required to submit samples for bacteriological water quality; monitoring frequency depends on the population served by the waterworks.

WATER DISINFECTION

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

Parameter	Minimum Limit (either/or)	Range (mg/L)	# Tests Required	# Tests Submitted	# Adequate Chlorine
Free Chlorine	0.1 mg/L	0.76 - 1.57	52	52	
Total Chlorine	0.5 mg/L	0.95 - 1.70	52	52	52

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual <u>OR</u> 0.5 mg/L total chlorine 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 test results on every bacteriological sample they submit.

Free Chlorine Residual for Water Entering Distribution System

Parameter	Limit (mg/L)	Range (mg/L)	# Tests Required	# Tests Performed	% Adequate Chlorine
Free Chlorine	At least 0.1	0.43 - 1.81	365	Continuous	100

Minimum 0.1 milligrams per litre (mg/L) free chlorine residual is required for water entering a distribution system. Residuals are continuously monitored and recorded. Tests performed by waterworks operators are recorded in operation records.