



**Drinking Water Quality and Compliance  
for *The Village of Muenster*  
2019 Annual Notice to Consumers**

## 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 *Village of Muenster's* water quality and sample submission compliance record for the January 1, 2019 to December 31, 2019 time period. This report was completed on **March 25<sup>th</sup>, 2020**. Readers should refer to the Agency's Municipal Drinking Water Quality Monitoring Guidelines, November 2015, 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: [http://www.hc-sc.gc.ca/ewh-smt/pubs/water-eau/index\\_e.html](http://www.hc-sc.gc.ca/ewh-smt/pubs/water-eau/index_e.html).

## Water Quality Standards

### Bacteriological Quality

Parameter/Location	Limit	Regular Samples Required	Regular Samples Submitted	# of Positive Regular Submitted (%)
Total Coliform and Background Bacteria	0 Organisms/100 mL Less than 200/100 mL	52	52	0

### Water Disinfection –

#### Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples

Parameter	Minimum Limit	Total Chlorine Residual Range	Free Chlorine Residual Range	# Tests Required	# Tests Submitted	# Adequate Chlorine (%)
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	0.62 - 1.18	0.15 - 0.88	52	52	52 (100%)

#### Water Disinfection - Free Chlorine Residual for Water Entering Distribution System from Waterworks Records-From Water Treatment Plant Records

Parameter	Limit (mg/L)	Test Level Range	# Tests Performed	# Tests Not Meeting Requirements
Free Chlorine Residual	at least 0.1	0.49-1.06	365	0

*A minimum of 0.1 milligrams per liter (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.*

### Turbidity – From Water Treatment Plant Records

Parameter	Limit (NTU)	Test Level # Tests Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed
Turbidity	1.0	0.06-0.21	0	0.21	365	365

**Chemical – Halo Acetic Acids (HAAs)**

Parameter	HAAs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Halo Acetic Acids	0.080	0.044	4 (1 every 3 months)	4

**Chemical – Trihalomethanes (THMs)**

Parameter	THMs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1	0.060	4 (1 every 3 months)	4

*Note: Only water supplies derived from surface water or groundwater under the influence of surface water are required to monitor for HAAs and THMs. Waterworks using groundwater sources beyond the influence of surface water do not need to report HAAs and THMs since sampling/analysis will not likely have been performed.*

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

Village of Muenster  
Box 98  
Muenster, Saskatchewan  
S0K 2Y0  
Telephone: 1-306-682-2794  
Email: [muenster@sasktel.net](mailto:muenster@sasktel.net)

**ANNUAL FINANCIAL OVERVIEW (2019)**

Total 2019 waterworks operating revenues (R) - \$196,299

Total 2019 waterworks operating expenditures (E) - \$223,190

Total debt payments of waterworks infrastructure loans (D) – \$26,579

Comparison of waterworks operating revenues to operating expenditures plus debt payments,  
expressed as a ratio –  $\frac{(196,299)}{(223,190) + (26,579)} = .79$

For 2019, waterworks operating revenues covered 79 percent of the waterworks operating expenditures. (Total 2019 waterworks expenditures of \$223,190 includes an amortization figure of \$47,033. (If this figure had not been factored into the equation, the waterworks would have shown a surplus of approximately \$20,142).

**RESERVES**

Reserves available for waterworks capital infrastructure :

Capital Trust Funds - \$19,863

\$64,988

Utility Reserve Fund - \$8,939

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Waterworks Information available for review at the Village of Muenster Office:

- Waterworks Rate Policy and Capital Investment Strategy
- Capital plans in place and related sources of funding for the projects.
- Financial Overview of the Waterworks
- Reserves available for Waterworks Projects
- Copy of the 2016 Waterworks System Assessment