



**Drinking Water Quality and Compliance
for The Village of Muenster
2021 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, 2021 to December 31, 2021 time period. This report was completed on Feb 28th, 2022. 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-smmt/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	0.62-1.12	0.17-0.81	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	0.39 – 0.90	365	0

A minimum of 0.1 milligrams per liter (mg/L) free chlorine residual is required for water entering the distribution system (unless otherwise stated in waterworks operating permit). 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	.04 – 0.87	0	0.87	365	365

Chemical – Health Category

All waterworks serving less than 5000 persons are required to submit water samples for WSA's Chemical Health category once every 2 years (*unless otherwise stated in waterworks operating permit*). The Chemical Health category includes analysis for arsenic, barium, boron, cadmium, chromium, fluoride, lead, nitrate, selenium and uranium. This data can be accessed from the Sask Water website at: [SaskWater- Solutions for Water & Wastewater](#)

Chemical – Halo Acetic Acids (HAAs)

Parameter	HAAs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Halo Acetic Acids	0.080	0.0551	4 (1 every 3 months)	4

Chemical – Trihalomethanes (THMs)

Parameter	THMs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1	0.0541	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
PH: 306-682-2794
Email: muenster@sasktel.net

ANNUAL FINANCIAL OVERVIEW (2021)

*Pre-Audit Overview

Total 2021 waterworks operating revenues (R) - \$223,177

Total 2021 waterworks operating expenditures (E) - \$278,195

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 – $\frac{(223,177)}{(278,195) + (26,579)} = .73$

For 2021, waterworks operating revenues covered 73 percent of the waterworks operating expenditures.
(Total 2021 waterworks expenditures of \$278,195 includes an amortization figure of \$47,033.)

RESERVES

Reserves available for waterworks capital infrastructure:

Capital Trust Fund - \$121,803

Utility Reserve Fund - \$5,071

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