

**TOWN OF HAFFORD**  
**Drinking Water Quality & Compliance**  
**Annual Notice to Consumers – 2021**

Introduction

Saskatchewan Environment 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 Minister's Order or Permit to Operate a waterworks. The following is a summary of the Town of Hafford's water quality and sample submission compliance record for the year ended December 31, 2021. If consumers need more information on the nature and significance of specific water tests, more detailed information is available from: <<http://www.hc-sc.gc.ca/hecs-sesc/water/dwgsup.htm>>.

**WATER QUALITY STANDARDS**

**Bacteriological Quality:**

<u>Type of Test</u>	<u># Regular Samples Required</u>	<u># Regular Samples Submitted</u>	<u># of Positive Submitted (%)</u>
Total Coliform & Background Bacteria	24	37	0 %

NOTE: The limit for Total Coliform is 0 organisms/100 mL and for Background Bacteria is less than 200/100 ml.

**Water Disinfection - Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples:**

<u>Type of Test</u>	<u>Total Chlorine Residual Range</u>	<u>Free Chlorine Residual Range</u>	<u># Tests Required</u>	<u>#Tests Submitted</u>
Chlorine Residual	.25 – 1.85 mg/L	0.08 – 1.01 mg/L	24	37

NOTE: The minimum limit for Chlorine in our System is 0.1 mg/L free or 0.5 mg/L total.

**Water Disinfection - Free Chlorine Residual for Water Entering Distribution System from Water Treatment Plant Records:**

<u>Type of Test</u>	<u>Test Level Range</u>	<u># Tests Performed</u>	<u># Tests Below Requirements</u>
Free Chlorine Residual	.03 – 1.03 mg/L	365	135

NOTE: A minimum of 0.2 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 recorded in the operation records.

**Turbidity - From Water Treatment Plant Records:**

<u>Type of Test</u>	<u># of Tests Within Range</u>	<u># of Tests Not Meeting Requirements</u>	<u>Maximum Turbidity</u>	<u># Tests Required</u>	<u># of Tests Performed</u>
Turbidity	100%	5	2.46 NTU	365	365

NOTE: Turbidity must be no greater than 1.0 NTU

**Chemical - Health Category:**

The Town of Hafford is required to submit water samples for Saskatchewan Environments Chemical Health category once every 2 years. The Chemical Health category includes analysis for aluminum, arsenic, barium, boron, cadmium, chromium, copper, iron, lead, manganese, selenium, antimony, silver, uranium and zinc. The last sample for Chemical Health analysis was submitted on June 9, 2020. Sample results indicated that the provincial drinking water quality standards were not exceeded. A copy of the test results are available upon request at the Town Office.

**General Chemical:**

The Town of Hafford is required to submit water samples for Saskatchewan Environments General Chemical category once every 2 years. The General Chemical category includes analysis for alkalinity, bicarbonate, calcium, chloride, conductivity, fluoride, magnesium, nitrate, hardness (as CaCO3), sodium, sulphate, pH and total dissolved solids. The last sample for General Chemical analysis was submitted on June 9, 2020. Sample results indicated that samples exceeded provincial aesthetic objectives for the General Chemical category for the following parameters:

<u>Parameter</u>	<u>Aesthetic Objectives</u>	<u>Sample Results</u>	<u>Comments</u>
Sulphate	500 mg/L	797.2 mg/L	Sulphates occur naturally in numerous minerals & in most waters. Levels above 200 mg/L may cause a noticeable taste. Levels over 500 mg/L may cause gastrointestinal distress. Levels over 600 mg/L can cause diarrhea in children.

Total dissolved solids 1500 mg/L 1876 mg/L Levels above 1500 mg/L often occur in Sask. ground waters. The average level measured in Sask. drinking water is 932 mg/L. Total dissolved solids are not considered a health hazard but they do affect the taste of water.

Hardness 800 mg/L 1161 mg/L Hardness represents the soap consuming power of water. It is caused mainly by calcium and magnesium. Waters with > than 200 mg/L of hardness are considered "hard".

Compliance with drinking water aesthetic objectives is not mandatory as these objectives are in the range where they do not constitute a health hazard. A copy of the test results are available at Hafford Town Office.

**More information on water quality and sample submission performance may be obtained from: Hafford Town Office, Box 220 Hafford, SK S0J 1A0.**