

Drinking Water Quality and Compliance for the TOWN of HANLEY 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 Town of Hanley water quality and sample submission compliance record for the January 1, 2021 to December 31, 2021 time period. This report was completed on June 15, 2022. Readers should refer to the Agency's <u>Municipal Drinking Water Quality Monitoring Guidelines</u>, <u>November 2002</u>, <u>EPB 202</u> 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: <u>http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index_e.html</u>.

Water Quality Standards

Bacteriological Quality

Total Chlorine Residual

| Parameter/Lo | ocation Lir | nit | Regular Samples Required | Regular Sa Submitted | | # of Posi Submitte | | |
|--|------------------------------------|--------------------|-----------------------------|-------------------------|---------|-----------------------|--------------------|--|
| Total Coliform | and 0 Organisms | /100 mL | 52 | 52 | | 0 | 100% | |
| Background E | Bacteria Le | ss than 200/100 mL | | | | | | |
| ¹ Note: | | | | | | | | |
| <u>Water Disinfection –</u> Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples | | | | | | | | |
| | Minimum | Total Chlorine | Free Chlorine | # Tests | # Tests | | # Adequate | |
| Parameter | Limit | Residual Range | Residual Range | Required | Submitt | ed (| Chlorine (%) | |
| Chlorine Residual | 0.1 mg/L free OR 0.5 mg/L total | 0.75 – 1.78 | not required | 52 | 52 | | 100% | |
| Water Disinfection - Total Chlorine Residual for Water Entering Distribution System from Waterworks Records-From Water Treatment | | | | | | | | |
| Plant Record | s | | - | - | | | | |
| Parameter | _ | Limit (mg/L) | Test Level Range | # Tests Perform | | Tests No equireme | ot Meeting ents | |

A minimum of 0.5 milligrams per litre (mg/L) total 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 total chlorine residual tests performed, the overall range of total chlorine residual (highest and lowest recorded values) and the number of tests and percentage of results not meeting the minimum requirement of 0.5 mg/L total chlorine residual. Since going on Saskatoon water, which is chloraminated water (mixture of hypochlor and ammonia sulphate), we rely on Total chlorine levels in the water to determine adequate disinfection of our water supply. This is why we have included Total chlorine numbers in place of Free chlorine numbers.

365

0

1.08 - 1.91

| Parameter Tests | Limit | Test Level # Tests | # Tests Not Meeting | Maximum | # Tests | # |
|--------------------|-------|-----------------------|---------------------|-----------------|----------|-----------|
| 16313 | (NTU) | Range | Requirements | Turbidity (NTU) | Required | Performed |
| Turbidity | 1.0 | 0.07 – 0.22 | 0 | 0.22 | 365 | 365 |

| <u>Chemical – Trihalo</u> | <u>methanes (THMs)</u> | | | |
|---------------------------|------------------------|------------------|----------------------|-----------|
| Parameter | THMs | Sample | # Samples | # Samples |
| | Limit (mg/L) | Result (average) | Required | Submitted |
| Trihalomethanes | 0.1 | 0.042 | 4 (1 every 3 months) | 4 |

at least 0.5

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

Box 1128 403 Main Street Watrous SK S0K 4T0 Canada ph: 306.946.3233 fax: 306.946.3232

Chemical – Halo Acetic Acids (HAAs)

| Parameter | | Sample | # Samples |
|-------------------|--------------|------------------|-------------------|
| | Limit (mg/L) | Result (average) | Required |
| Halo Acetic Acids | 0.080 | 0.0229 4 (| 1 every 3 months) |

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. The Chemical Health category includes analysis for arsenic, barium, boron, cadmium, chromium, fluoride, lead, nitrate, selenium and uranium. Since Hanley gets there water from the Saskatoon Water Treatment Plant, these tests were performed by the City of Saskatoon.

Samples Submitted 4

The City of Saskatoon does their Chemical Health analysis yearly. Sample results can be reviewed on the Government of Saskatchewan Drinking water Quality website by going to:

https://www.saskatchewan.ca/residents/environment-public-health-and-safety/environmental-health/water-and-wastewater-management

Go to Drinking Water Quality, 2 times, Click Sample Tests, and finally, Choose Saskatoon Waterworks for location and click Search.

General Chemical

All waterworks serving less than 5000 persons are required to submit water samples for WSA's General Chemical category once every two years if a ground water source and once per three months every second year if a surface water or blended surface/groundwater source. The General Chemical category includes analysis for alkalinity, bicarbonate, calcium, carbonate, chloride, conductivity, hardness (as CaCO₃), magnesium, sodium, sulphate and total dissolved solids. Since Hanley gets their water from the Saskatoon Water Treatment Plant, the required tests were performed by the City of Saskatoon.

Sample results can be reviewed on the Government of Saskatchewan website by going to:

https://www.saskatchewan.ca/residents/environment-public-health-and-safety/environmental-health/water-and-wastewater-management

Go to Drinking Water Quality, 2 times, Click Sample Tests, and finally, Choose Saskatoon Waterworks for location and click Search

*Objectives apply to certain characteristics of substances found in water for human consumptive or hygienic use. The presence of these substances will affect the acceptance of water by consumers and/or interfere with the practice of supplying good quality water. Compliance with drinking water aesthetic objectives is not mandatory as these objectives are in the range where they do not constitute a health hazard. The aesthetic objectives for several parameters (including hardness as CaCO₃, magnesium, sodium and total dissolved solids) consider regional differences in drinking water sources and quality.

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

https://www.saskatchewan.ca/residents/environment-public-health-and-safety/environmental-health/water-and-wastewater-management

Go to Drinking Water Quality, 2 times, Click Sample Tests, and finally, Choose Hanley Waterworks for location and click Search

Or by contacting The Hanley Town Office at:

Town of Hanley Box 270 Hanley, SK S0G 2E0 townahanley@sasktel.net 306-544-2223