

Drinking Water Quality and Compliance
Interlake Regional Water Board
Station Number SK05EG0309
2024 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 Interlake Regional Water Board's water quality and sample submission compliance record for the January 1, 2024, to March 31, 2024, time period. This report was completed on February 1, 2025. Readers should refer to the WSA's Municipal Drinking Water Quality Monitoring Guidelines 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>.

SaskWater certified operation and maintenance contract with the Interlake Regional Water Board ended on March 31, 2024.

BACTERIOLOGICAL QUALITY

| Parameter | Limit | Regular Samples Required | Regular Samples Submitted | # Positive of Regular Submitted |
|---------------------|----------------------|--------------------------|---------------------------|---------------------------------|
| Total Coliform | 0 Organisms/100 mL | 13 | 13 | 0 |
| E. coli | 0 Organisms/100 mL | 13 | 13 | 0 |
| Background Bacteria | Less than 200/100 mL | 13 | 13 | 0 |

Analysis is performed on a single sample for all parameters mentioned above. All waterworks are required to submit samples for bacteriological water quality; the frequency of monitoring 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 | 0.10 mg/L | 0.68 – 0.96 | 13 | 13 | 13 |
| Total Chlorine | 0.50 mg/L | 0.72 – 1.04 | 13 | 13 | |

A minimum of 0.10 milligrams per litre (mg/L) free chlorine residual **OR** 0.50 mg/L total chlorine residual 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 minimum. A waterworks is required to submit chlorine residual test results on every bacteriological sample they submit.

Free Chlorine Residual for Water Entering Distribution System

| Parameter | Minimum Limit (mg/L) | Range (mg/L) | # Tests Required | # Tests Performed | % Adequate Chlorine |
|---------------|----------------------|--------------|------------------|-------------------|---------------------|
| Free Chlorine | 0.20 | 0.53 – 1.04 | 91 | Continuous | 100 |

Residuals are continuously monitored and recorded. Tests normally performed on a daily basis by waterworks operators are recorded in operation records. Additional testing was done for informational purposes.

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TURBIDITY

Turbidity for Water Entering the Distribution System

| Parameter | Limit (NTU) | Range (NTU) | 95 th Percentile | # Tests Required | # Tests Performed | # of months Exceeding 95% Limit |
|-----------|-----------------------------------|-------------|--------------------------------|---------------------|----------------------|---------------------------------------|
| Turbidity | < 1.0 – 95% of time each month | 0.06 – 0.19 | 0.13 | 91 | 91 | 0 |

Turbidity in the Distribution System – From Test Results Submitted with Bacteriological Samples

| Parameter | Limit (NTU) | Range (NTU) | # Tests Required | # Tests Performed | # Exceeding Limit |
|-----------|-------------|-------------|---------------------|----------------------|----------------------|
| Turbidity | No standard | 0.03 – 0.39 | 13 | 13 | 0 |

Turbidity is a measure of water treatment efficiency. Turbidity measures the "clarity" of the drinking water and is generally reported in Nephelometric Turbidity Units (NTU). All waterworks are required to monitor turbidity at the water treatment plant. The turbidity is done daily with a bench testing instrument.

CONDUCTIVITY

For Membrane Permeate Water

| Parameter | Regulatory Limit | Range | # Tests Required | # Tests Submitted | # Exceeding Limit |
|----------------------|---------------------|---------------|---------------------|----------------------|----------------------|
| Conductivity (µs/cm) | No Limit | 135.6 – 190.6 | 45 | 45 | 0 |

Conductivity is tested on by waterworks operators and recorded in operation records.

pH

For Water Entering the Distribution System

| Parameter | Regulatory Limit | Aesthetic Objective | Average | # Tests Required | # Tests Submitted |
|-----------|---------------------|------------------------|---------|---------------------|----------------------|
| pH | No Limit | 7.0 – 10.5 | 7.64 | 91 | 91 |

The pH is tested on a daily basis by waterworks operators and recorded in operation records.

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ARSENIC

For Water Entering Distribution System

| Parameter | Limit (mg/L) | Result (mg/L) | #Tests Required | # Tests Submitted | # Exceeding Limit |
|-----------|--------------|---------------|-----------------|-------------------|-------------------|
| Arsenic | 0.010 | <0.0001 | 1 | 1 | 0 |

CHEMICAL – GENERAL

Interlake Regional Water Board is required to submit water samples for the WSA's General Chemical category once every second year. 2024 is a required sample year.

| Parameter | MAC | AO * | Sample Results | # of Samples Required | # of Samples Submitted |
|-------------------------------|--------------|------------|----------------|-----------------------|------------------------|
| Total Alkalinity (mg/L) | | 500 | 106 | 1 | 1 |
| Bicarbonate (mg/L) | No Objective | | 129 | 1 | 1 |
| Calcium (mg/L) | No Objective | | 10 | 1 | 1 |
| Carbonate (mg/L) | No Objective | | <1 | 1 | 1 |
| Chloride (mg/L) | | 250 | 5.9 | 1 | 1 |
| Fluoride (mg/L) | 1.5 | | 0.02 | 1 | 1 |
| Total Hardness (mg/L) | | 800 | 40 | 1 | 1 |
| Hydroxide (mg/L) | No Objective | | <1 | 1 | 1 |
| Magnesium (mg/L) | | 200 | 3.6 | 1 | 1 |
| Nitrate (mg/L) | 45 | | 0.05 | 1 | 1 |
| pH (pH units) | | 7.0 – 10.5 | 7.85 | 1 | 1 |
| Potassium (mg/L) | No Objective | | 0.8 | 1 | 1 |
| Sodium (mg/L) | | 300 | 47 | 1 | 1 |
| Conductivity (µs/cm) | No Objective | | 278 | 1 | 1 |
| Sulphate (mg/L) | | 500 | 23.0 | 1 | 1 |
| Sum of Ions (mg/L) | No Objective | | 219 | 1 | 1 |
| Total Dissolved Solids (mg/L) | | 1500 | 162 | 1 | 1 |

MAC – Maximum Acceptable Concentrations

AO – Aesthetic Objective

*Objectives apply to certain characteristics of or 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 hazards. 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.

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CHEMICAL – HEALTH

The Interlake Regional Water Board is required to submit water samples for the WSA's Chemical Health category once every second year. 2024 is a required sample year.

| Parameter | MAC (mg/L) | IMAC (mg/L) | AO (mg/L) | Sample Results (mg/L) | # of Samples Required | # of Samples Submitted |
|-----------|---------------|----------------|--------------|--------------------------|--------------------------|---------------------------|
| Aluminum | No Objective | | | 0.0082 | 1 | 1 |
| Antimony | 0.006 | | | <0.0002 | 1 | 1 |
| Arsenic | 0.010 | | | 0.0004 | 1 | 1 |
| Barium | 1.0 | | | 0.0038 | 1 | 1 |
| Boron | | 5.0 | | 0.22 | 1 | 1 |
| Cadmium | 0.005 | | | <0.00001 | 1 | 1 |
| Chromium | 0.05 | | | <0.0005 | 1 | 1 |
| Copper | | | 1.0 | 0.005 | 1 | 1 |
| Iron | | | 0.3 | 0.0016 | 1 | 1 |
| Lead | 0.01 | | | 0.0001 | 1 | 1 |
| Manganese | | | 0.05 | 0.0035 | 1 | 1 |
| Selenium | 0.01 | | | <0.0001 | 1 | 1 |
| Silver | No Objective | | | <0.00005 | 1 | 1 |
| Uranium | 0.02 | | | <0.0001 | 1 | 1 |
| Zinc | | | 5 | 0.0006 | 1 | 1 |

MAC – Maximum Acceptable Concentrations

AO – Aesthetic Objective

IMAC – Interim Maximum Acceptable Concentrations

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

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