Town of The Pas
2025 Water System Annual Report

WATER SUPPLY

The Town of The Pas draws its raw water from the Saskatchewan River that is gravity fed to a well. The water is pumped from the well into the water treatment plant.

TREATMENT PROCESS

At the well, potassium permanganate is introduced to the raw water for taste and odor control.

When the water enters the plant, aluminum sulphate and a coagulant are added. The water is then sent to two mixing chambers. In the mixing chambers another coagulant aid is introduced. The raw water and additives are then mixed and suspended solids precipitate from the water. After this point, the water passes through four (4) dual media filters before the finished water is sent into clear wells for storage. Chlorine is added as a residual disinfectant; the water is sterilized by ultraviolet reactors.

WATER DISTRIBUTION SYSTEM

The treated water is pumped from the water treatment plant to the consumers via a system of underground pipes. The water is metered for consumption and is billed accordingly.

WATER TESTING

- Raw water is tested daily for turbidity.
- Treated or finished water is tested daily for turbidity and chlorine residual.
- Water is tested 4 times per year for THM's and HAA's. It is also tested for Microcystin 1 time per year.
- Raw and Treated Water is tested yearly for total water chemistries.

BACTERIOLOGICAL TESTING

Samples of raw water, treated water and points in the distribution system are tested bi-weekly for coliforms and E.Coli. The results of these tests are shown in the table below:

BACETERIOLOGICAL MONITORING AND REPORTING	Regulatory Requirement	PWS Performance
Number of raw/incoming water samples	26	26
Number of treated water samples	26	26
Number of distribution water samples (2 sampling locations)	52	52
Frequency of testing	Bi-weekly	100%
Total coli form present in water samples	0 TC per 100 mL	100%
E.coli present in water samples	0 EC per 100 mL	100%
COMMENTS: 1 resamples: 1 froze before delivery		

TURBIDITY TESTING

Turbidity is a measurement of water clarity. This test is used as a benchmark on how the treatment process is working. Facilities are obligated to meet regulatory requirements on the filtering process and the treated water that is sent to consumers. The results of these tests are shown in the table below:

Turbidity Standards	Regulatory Requirement	PWS Performance
Chemically assisted, rapid gravity filtration process	≤ 0.3 NTU in at least 95% of the samples taken per month	100% (99.998%)
	Not to exceed 0.3 NTU for more than 12 continuous hours	100%
	Not to exceed 1.0 NTU at anytime	100%
Frequency of testing	Daily - continuously	100%

DISINFECTION TESTING & MONITORING

This testing is done to ensure that the water is safe for the consumer and to meet the regulatory requirements. The results of these tests are shown in the table illustrated below:

Chlorine Requirements	**Regulatory Requirement**	**PWS Performance**
(A) Free chlorine residual entering the distribution system	≥ 0.5 mg/L	100% (2.13 mg/L)
(B) Free chlorine residual in the distribution system	≥ 0.1 mg/L	98.08% (0.71 mg/L)
(C) Frequency of testing	Daily for A	100%
	Bi Weekly for B	100%
(D) Report submissions	Monthly	100%

DISINFECTION BY-PRODUCTS MONITORING & REPORTING

These tests are done to meet Regulatory requirements. The results of these tests are shown on the following table:

DISINFECTION BY –PRODUCTS MONITORING AND REPORTING	Regulatory Requirement	PWS Performance
A) Total Trihalomethane sampling requirements	4 times per year	100%
B) Total Trihalomethane Standard	0.1 mg/L	0.075 mg/L
C) Total Haloacetic Acids sampling requirements	4 times per year	100%
D) Total Haloacetic Acids Standard	0.080 mg/L	0.045 mg/L
E) Microcystin sampling requirements	1 time per year	100%
F) Microcystin Standard	1.5 ug/L	0.5 ug/L

WATER CHEMISTRY ANALYSIS

Chemical analysis tests were done on the raw and treated water in May 2025. The treated water met all the G.C.D WQ maximum-acceptable concentrations for health-based parameters.

EMERGENCY-COMPLIANCE ISSUES

- Town of The Pas Water and Sewer Crews fixed approximately 26 water main breaks in 2025.

FUTURE INITIATIVES FOR IMPROVEMENT

The Town will carry out an aggressive flushing/valve program as per the unidirectional flushing plan to clear the water mains to help keep up our residuals. The Town is working on a water main renewal program to replace the aging water main infrastructure and continue to provide its citizens with safe drinking water.

For general questions during regular business hours call the Engineering Department at 204-627-1125. For emergency calls please phone 1-204-623-2330.

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Town of The Pas