Town of Morris Annual Water System Operation Report- 2018

The Town of Morris, Manitoba strives to provide high quality drinking water in sufficient quantity to meet the needs of the public. It is our goal to do so in a safe, cost efficient manner while remaining in compliance with the regulatory requirements governing the provision of drinking water.

It is our belief that the public has the right to access information related to the drinking water they consume. To that end the following report has been prepared for the Community of Morris water system.

Description of the Water System:

Source:

The Town of Morris purchases water from the Pembina Valley Water Co-op which draws water from the Red River at the Morris Regional Water Treatment Plant. The water enters an intake located near the water plant, is then piped into town through the Pembina Valley Water Co-op's Pipeline which is held in a reservoir which holds 500,000 gallons. This water is then distributed to the end consumers.

Treatment:

Water is treated at the Pembina Valley Water Co-op Treatment Plant in Morris. A detailed description of their treatment process can be obtained directly from the PVWC at 204-746-2790 or email: pvwc@mts.net.

Upon entering the reservoir, the treated water is re-chlorinated to ensure that required disinfection residuals are maintained throughout the system. Treated water is then pumped throughout the distribution system to the final consumer.

Water is treated to ensure that safe and pleasing drinking water is supplied to the homes and businesses in Morris. In addition, new Provincial Regulations have set health-based drinking water standards for all public water systems. The Town of Morris is committed to meeting and exceeding the water quality standards set by the province providing the best tap water.

Distribution:

The distribution system is a network of underground pipes which delivers treated water from the water treatment facility to the homes and businesses in the Town of Morris. The piping is interconnected to ensure that fresh safe water is continuously supplied.

Testing:

Water tests are taken on a routine basis to ensure that the water is safe and to monitor how well the treatment facility is performing. Water is tested at the treatment facility and in the distribution system at various locations and times. It is a regular requirement that all water test results associated with water safety be submitted to the provincial Office of the Drinking Water for review.

Bacterial testing:

Samples of water are submitted to a Laboratory Group for analysis every two weeks from the incoming treated water (PVWC), the outgoing treated water from the reservoir, and a distribution system location. The distribution chlorine residuals are measured at the same time and location as the bacteriological distribution samples. At any time when the free chlorine residual requirement is not met immediate action is taken to adjust amounts of chlorine being added to ensure future compliance.

Disinfectant tests

Water samples are retrieved tested and recorded onsite for Chlorine levels each day. There are two chlorine standards, one for leaving the reservoir and one for within the distribution system. The minimum free chlorine standards are 0.5 mg/l leaving the reservoir and 0.1 mg/l throughout the distribution system.

Trihalomethane (THM) test:

The standard for trihalomethanes is based on a running average of quarterly samples taken seasonally (February, May, August and November)

Results of tests

The following table summarizes all the treated water results for 2018:

Testing Parameter	Standard	PWS Performance	Met Standard
Bacterial	0 TC per 100ML TC & EC	0	Yes
Chlorine (entering)	.05 mg/L	100%	Yes
Chlorine (distribution sys)	.01 mg/L	100%	Yes
THM	.074 mg/L	100%	Yes

How Public Works Staff is notified in case of emergencies:

The Public Works staff is notified by telephone of any emergencies or discrepancy with the system. A Public Works Staff member is on call 24 hours/day.

Water system incidents:

Bill's Pizza – Curb stop repair
Chicken Chef – Curb stop repair
Dave Smith – Curb stop repair
McMillan - Curb stop repair
Fire Hydrant Repairs
- Railroad (3rd block)
- Ash Blvd

Fire Hydrant Replacement
- Boyne West & Hwy 75
- Victoria Ave

Sewer repair at MTS building
Sewer line patch – Ottawa West

Drinking Water Safety orders on system:
None

Boil Water advisories issued:
None

Warnings issued or charges - in accordance with Drinking Water Safety Act:
None

Major Expenses Incurred:
Water Reservoir Repairs
- Divers contracted to plug inlet & discharge lines of reservoir
- Drain reservoir
- Remove & Replace inlet & discharge valves
- Repair 16" discharge pipe (compressed)
- Clean & disinfect reservoir (Contec Contractors)
- Install new Milltronics at distribution plant
- Fill & test water as per ODW regulations
- Complete test of distribution system

Future system expansion:
Asset Management discussion regarding new distribution plant

Water Distribution Plant Information and Pump Capacities

Water Reservoir Capacity – 500,000 gallons

2 - Constant Speed Service Pump – 25 lps @ 460 kPa (396 US gpm)

Variable Speed Service Pump – 25 lps @ 460 kPa (396 US gpm)

Vertical Turbine Fire Pump – 115 lps @ 460kPa (1822 US gpm)