

Manitoba



Water Stewardship

Office of Drinking Water

1007 Century Street, Winnipeg MB R3H 0W4

**OPERATING LICENSE FOR
A PUBLIC WATER SYSTEM**

LICENSE NUMBER: PWS-09-287

**THE DRINKING WATER SAFETY ACT
CHAPTER D101, C.C.S.M.**

WATER SYSTEM CODE: 219.00
OPERATION ID: 6607
EFFECTIVE DATE: MARCH 1, 2009
EXPIRY DATE: FEBRUARY 28, 2014

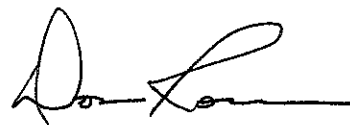
IN ACCORDANCE WITH *THE DRINKING WATER SAFETY ACT*, THIS OPERATING LICENSE IS ISSUED PURSUANT TO SUBSECTION 8(1) TO:

CITY OF STEINBACH: "THE LICENSEE"

FOR THE OPERATION OF THE **STEINBACH PUBLIC WATER SYSTEM**, WHICH INCLUDES INTAKE STRUCTURES, TREATMENT FACILITIES, WATER STORAGE RESERVOIRS, AND DISTRIBUTION LINES, SUBJECT TO THE ATTACHED TERMS AND CONDITIONS.

THIS LICENSE DOES NOT AFFECT THE LICENSEE'S OBLIGATIONS WITH RESPECT TO COMPLIANCE WITH ALL APPLICABLE MUNICIPAL, PROVINCIAL, AND FEDERAL LEGISLATION. THIS LICENSE SUPERSEDES ALL PREVIOUS LICENSES AND CERTIFICATES OF APPROVAL FOR THIS PUBLIC WATER SYSTEM.

DATE: February 13, 2009



Don Rocan, P.Eng.
Director

TERMS AND CONDITIONS

1. GENERAL

- 1.1. The Licensee shall operate the public water system in accordance with all applicable requirements of *The Drinking Water Safety Act* and its regulations, and the requirements of this Licence. In the event that specific terms and conditions of this Licence imposed under the authority of subsection 8(3) of the Act exceed the general requirements of the Act and regulations, the specific requirements of this Licence shall apply.
- 1.2. The Licensee shall obtain approval from the Office of Drinking Water prior to making any significant alterations to the water source, the water treatment process, the water storage facilities or the water distribution system.
- 1.3. This Licence may be amended by the Director where, in the opinion of the Director, an amendment is necessary and the amendment will not negatively impact, a) the safety of water obtained from the water system; or b) effective environmental management.
- 1.4. The Licensee may request an amendment to this permit by submitting an amendment application to the Office of Drinking Water.
- 1.5. This Licence may be suspended or cancelled by the Director for any of the reasons identified in Section 11 of *Manitoba Regulation 40/2007, Drinking Water Safety Regulation* or due to a failure to comply with any term or condition of this Licence.
- 1.6. The Licensee shall provide written notice to the Office of Drinking Water of any change in title/ownership of the water system within 30 days of the transfer of title/ownership.
- 1.7. The Director of the Office of Drinking Water, Medical Officer of Health or Drinking Water Officer may enter any water system facility as necessary to carry out the provisions of *The Drinking Water Safety Act* and its regulations.
- 1.8. The Licensee shall post a copy of this Licence in its entirety at the water treatment facility and ensure all operators are familiar with its terms and conditions.
- 1.9. The Licensee shall apply for renewal of this Licence at least 60 days prior to its expiry.

2. OPERATION - GENERAL

- 2.1. The Licensee shall operate all facilities, control systems and equipment as efficiently as possible, inspect them on a regular basis, and maintain them in good working order.
- 2.2. The Licensee shall ensure that all equipment used for disinfection is maintained in effective working order and keep available for immediate use all spare parts and chemical supplies as may be necessary to ensure continuous disinfection, including, if necessary a spare disinfection unit.
- 2.3. The Licensee shall protect the water system from contamination against such risks as cross connections as per the *Manitoba Plumbing Code 128/2006*.

- 2.4. The Licensee shall ensure that all chemicals and components that may come into contact with potable water are certified safe for potable water use through AWWA Standards, ANSI/NSF Standard 60 or 61, Health Canada, or other standards acceptable to the Director.
- 2.5. The Licensee shall ensure that disinfection in accordance with applicable AWWA, Manitoba Water Services Board, or City of Winnipeg standards, or other standards approved by the Director, is undertaken following construction, repair or maintenance activities on the water system. A copy of all associated test results must be kept available for review by the Office of Drinking Water for a minimum of 24 months.
- 2.6. The Licensee shall submit an emergency response (contingency) plan in a form acceptable to the Director that addresses routine and major emergencies such as equipment malfunctions, upset conditions and contamination events by March 1, 2011.
- 2.7. The Licensee shall have an assessment of water system infrastructure and water supply sources completed and submitted by a qualified professional engineer, who is not an employee of the water system, in a form satisfactory to the Director by March 1, 2009.

3. WATER QUALITY STANDARDS

- 3.1. The Licensee shall operate the water system in a manner that achieves the following water quality standards specified in Table 1, as determined through the monitoring requirements specified in Table 2:

Table 1: Water Quality Standards

Parameter	Quality Standard
Total coliform and E. coli	Less than one E. coli and total coliform bacteria detectable per 100 mL in all treated and distributed water
Chlorine residual	<ul style="list-style-type: none"> ▪ A free chlorine residual of at least 0.5 mg/L in water entering the distribution system following a minimum contact time of 20 minutes. ▪ A free chlorine residual of at least 0.1 mg/L at all times at any point in the water distribution system.
Arsenic	Less than or equal to 0.01 mg/L
Benzene	Less than or equal to 0.005 mg/L
Fluoride	Less than or equal to 1.5 mg/L
Lead	Less than or equal to 0.01 mg/L
Nitrate	Less than or equal to 45 mg/L measured as nitrate (10 mg/L measured as nitrogen)
Trichloroethylene	Less than or equal to 0.005 mg/L
Tetrachloroethylene	Less than or equal to 0.03 mg/L
Uranium	Less than or equal to 0.02 mg/L

- 3.2. If a standard is not met, the Licensee shall immediately undertake the corrective actions as listed in Schedule A or Schedule C of *Manitoba Regulation 41/2007, Drinking Water Quality Standards Regulation*, as applicable.

4. WATER QUALITY MONITORING

- 4.1. The Licensee shall immediately notify the Office of Drinking Water of any condition that may affect the ability of the water system to produce or deliver safe drinking water including treatment upsets or bypass conditions, contamination of the source water or treated water, a disinfection system failure or a distribution system failure.
- 4.2. Where water quality analysis is required to be undertaken by a laboratory, the Licensee shall ensure that the analysis must be carried out by Laboratories in accordance with the requirements of ISO 17025 (2005) as accredited by SCC, CALA, or other approved accrediting agency, unless prior approval for submission to an alternate laboratory is obtained from the Director.
- 4.3. The Licensee shall ensure that all water quality monitoring equipment is properly maintained and calibrated according to manufacturer recommendations and that records are maintained to that effect.
- 4.4. The Licensee shall operate equipment capable of continuously monitoring the free chlorine residual at no more than five-minute intervals in water entering the water distribution system following a minimum of 20 minutes of contact time.
- 4.5. In instances where continuous disinfectant residual monitoring equipment is offline, the Licensee shall ensure that a minimum of one sample per day is tested using an approved portable analysis unit and that the results are recorded.
- 4.6. Unless otherwise noted, the Licensee shall submit all monitoring results within seven days following the month during which the monitoring was conducted.
- 4.7. The Licensee shall ensure that sampling within the distribution system takes place at locations acceptable to the Office of Drinking Water.
- 4.8. The Licensee shall ensure that raw water samples are taken on an alternating basis in instances where more than one water supply well is used.
- 4.9. The Licensee shall ensure monitoring is completed as set out in Table 2.

Table 2. Monitoring Schedule

Parameter	Monitoring Requirement
Bacteriological (total coliform and E. coli)	<ul style="list-style-type: none"> ▪ Weekly sampling program with each set of samples consisting of one raw, one treated, and a minimum of 2 distribution samples. ▪ Consecutive samples separated by at least five days.
Free chlorine (treated water)	<ul style="list-style-type: none"> ▪ Continuous sampling of water entering the distribution system following at least twenty minutes of contact time. ▪ A confirmatory sample to be taken weekly at a location established by the Drinking Water Officer.
Free chlorine (distribution system)	At the same times and location(s) as bacteriological distribution system sampling.
Total chlorine (treated water)	One sample per day of water entering the distribution system following at least twenty minutes of contact time.
Total chlorine (distribution system)	At the same times and location(s) as bacteriological distribution system sampling.
Turbidity	One raw water sample per day.

Parameter	Monitoring Requirement
General chemistry (to include arsenic, benzene, fluoride, nitrate, trichloroethylene, tetrachloroethylene, and uranium)	One raw and one treated water sample once each year during July or August.
Lead	As per the instructions of the Drinking Water Officer

5. RECORD-KEEPING AND REPORTING

- 5.1. The Licensee shall record disinfectant residual measurements on the monthly disinfection report form or other form satisfactory to the Director, keep one copy for records and forward the original copy to the Drinking Water Officer within seven days after the end of each calendar month.
- 5.2. The Licensee shall record distribution system disinfectant residual measurements on the chain of custody form (laboratory submission form) which accompanies the bacteriological sample bottles to the laboratory.
- 5.3. Where corrective actions are required for total coliform and disinfectant residual compliance purposes (as per the *Operational Guidelines For Monitoring and Reporting Public and Semi-Public Water Systems*, ODW Guideline 2007-01), the Licensee shall complete a Corrective Actions Report form. The Licensee shall keep one copy for owner records and forward the original copy to the Drinking Water Officer along with the monthly disinfection, or turbidity report form.
- 5.4. The Licensee shall retain in chronological order for a minimum of 24 months the following operational records for the water system: all laboratory analysis reports, monthly disinfection and turbidity report forms, and corrective action forms.
- 5.5. The Licensee shall maintain in a secure location all construction drawings for the life of the water system components.
- 5.6. The Licensee shall ensure that every record, order, permit, advisory, license, and report related to the water system are kept in a secure location and made available on request from the Office of Drinking Water.
- 5.7. The Licensee shall ensure the following information is available to the public for inspection: a copy of every water quality analysis result required to be performed over the last 24 months, a copy of every permit, order, advisory and licence in effect, and a copy of every annual report required in relation to the water system.
- 5.8. Beginning in year 2008, the Licensee shall submit an annual report to the Director by March 31st of each year on the operation of the water system in the immediately preceding calendar year. The report shall include the information as set out in subsection 32(2) of *Manitoba Regulation 40/2007, Drinking Water Safety Regulation*.
- 5.9. The Licensee shall inform the public, in a form satisfactory to the Director, whenever an annual report has been prepared and how a free copy can be obtained.

5.10. The Licensee shall make a copy of each annual report available to the public at no charge on an Internet website within two weeks of the issuance of the report, unless otherwise approved by the Director.