Operating a Semi-public Water System: The Drinking Water Safety Act

PURPOSE
This guideline has been established to ensure that semi-public drinking water suppliers throughout the Province of Manitoba understand their regulatory requirements with regard to the operation of a semi-public water system.

Legislation
The Drinking Water Safety Act (DWSA) provides definitions for public and semi-public water systems. These are described in Types of Water Systems DWO-OG-08.

Section 8(2) of the DWSA states that no person shall operate a semi-public water system unless the person holds a current operating licence.

Section 8(3) of the DWSA states that the operating licence may be subject to terms and conditions that the director considers necessary to provide for the safety of the water obtained from a water system.

The Drinking Water Safety Regulation (MR 40/2007) Drinking Water Safety Regulation sets out regulatory requirements for the operation of semi-public water systems. Key clauses from the regulation follow; however, semi-public water systems must be familiar with all aspects of this regulation.

CONSTRUCTION AND ALTERATION PERMITS
Sections 3 to 7
Semi-public water systems are required to apply for a permit to construct or alter their water system prior to beginning construction or installing treatment equipment.

The application process for semi-public water systems may be as simple as contacting the Office of Drinking Water’s Approval Branch and reviewing the works. In more complex situations, a completed application form including a design brief and a copy of the design plans or schematic drawings may be required.

OPERATING LICENCES
Sections 8 to 16
An application for renewal of the operating licence is to be submitted 60 days prior to the expiry date.

The operating licence may be amended on the request of the licence holder with the approval of the director or by the Director where, in the opinion of the Director an amendment is necessary to provide for the safety of water from the system.

The operating licence is binding on a person who purchases or otherwise becomes an owner of the water system. Written notice should be provided to the Office of Drinking Water at least 30 days prior to any change in ownership of the water system, or if water service is to be discontinued, or if the length of service changes from year-round to seasonal or the opposite.

DISINFECTION REQUIREMENTS
Sections 17 to 22
Every semi-public water supplier using surface water or ground water under the direct influence of surface water (GUDI) must disinfect.

In addition, semi-public water systems listed under section 18(2) of the regulation and in DWO-OG-08 must disinfect for the purpose of meeting the bacteriological and microbial standards for the water system as specified in the Drinking Water Quality Standards Regulation or the operating licence.

Semi-public water systems that are required to disinfect must use either: chlorine disinfection, with a minimum contact time of 20 minutes under peak demand conditions; or a method or combination of methods of disinfection approved by the director (ex: ultra violet light followed by chlorine disinfection). Disinfection levels are specified in the operating licence for the water system.

Sections 18(3) and (4) of the regulation allows the director to waive the disinfection requirement for public facilities specified in Section 18(2) provided testing confirms the water supply is bacteriologically safe; there is no evidence that the water supply has been improperly constructed or maintained, and there is no distribution system to
convey water to external buildings or standpipes. The waiver of disinfection requirements must be included in the water system operating licence.

The Director may require the installation of water treatment equipment at any time in the future should water quality monitoring or other information indicate that such measures are required to protect public health.

Semi-public water systems that are required to disinfect must ensure that equipment is properly maintained in accordance with manufactures requirements and spare parts are on hand to ensure continuous disinfection.

Semi-public water systems that are required to disinfect must demonstrate disinfection residuals are being maintained to the levels specified in the operating licence.

TESTING AND RECORDKEEPING REQUIREMENTS FOR DISINFECTION
Sections 23 to 25
A semi-public water supplier required to disinfect must ensure that disinfectant residuals are tested and recorded at a frequency as specified in the operating licence.

The disinfection residual test results are recorded on a form that is submitted to the regional drinking water officer at the end of each month.

SAMPLING AND ANALYSIS FOR BACTERIOLOGICAL, CHEMICAL, RADIOLOGICAL, PHYSICAL AND MICROBIAL STANDARDS
Sections 26 to 28
All semi-public water systems are required to collect water samples and submit them to an accredited laboratory for bacteriological analysis at a minimum frequency of four (4) samples per year unless otherwise specified in the operating licence.

Sampling requirements for other water quality standards required under the Drinking Water Quality Standard Regulation (MR 41/2007) are specified in the operating licence.

Water samples from semi-public systems not required to disinfect are collected from the source before any treatment or disinfection occurs (Drinking Water Sample).

Water systems required to disinfect will collect samples from the Raw Water prior to any treatment or disinfection, the Treated Water after treatment or disinfection and if required, the Distributed Water as specified in the operating licence.

RECORDKEEPING REQUIREMENTS FOR SEMI-PUBLIC WATER SUPPLIERS
Section 31
Every semi-public water supplier must make a record in a form satisfactory to the director of any matter specified in the operating licence for the water system.

Records must be submitted to the regional drinking water officer within seven days after the end of the calendar month in which the event occurred.

All records pertaining to the water supply must be kept in a secure location for a minimum of 24 months or as specified in the operation licence.

PUBLIC INFORMATION REQUIREMENTS
Sections 33 to 34
All records pertaining to the last 24 months of operation must be made available for inspection by any member of the public during normal business hours without charge. This includes copies of every analytical results and any orders, permits advisories or licences that are still in effect.

INFRASTRUCTURE ASSESSMENTS
Section 37 and Schedule C
Semi-public water systems are required to submit routine assessments of their system. Depending on the source water, the assessment may be a self assessment or an assessment conducted by a qualified person. Assessment requirements are specified in the operating licence.

Office of Drinking Water
Regional Drinking Water Officers are available for operational and monitoring advice and to provide technical assistance.

After hours, please call the Environmental Emergency Response line at 204-944-4888 and ask for the on-call drinking water officer

For more information related to Manitoba’s drinking water and how it is regulated visit: www.manitoba.ca/drinkingwater