

## **Preparing for a Water System Assessment**

Water systems in Manitoba are required to have a periodic assessment of their water system completed in accordance with requirements set out in The Drinking Water Safety Act and The Drinking Water Safety Regulation.

***This information bulletin provides advice to water system owners and operators on how to prepare for an engineering or qualified person assessment.***

### ***What is the purpose of a water system assessment?***

The purpose of an assessment is to identify any issues or deficiencies with a drinking water system to ensure safe water is being, and continues to be, supplied to water users.

Water source, water supply, water treatment, water storage, and water distribution components must be thoroughly evaluated for their ability to meet regulatory requirements and industry best practice. The assessment will typically include a review of water system records and reports, interviews with key personnel and a site visit. Most systems, with the exception of very small or low risk systems, have to hire an engineer or other qualified person to conduct the assessment. Very small or low risk systems may be eligible to conduct self-assessments.

A periodic assessment is a critical component of the ongoing process of owning, managing and maintaining a water system in accordance with regulatory and industry standards.

### ***What steps should be taken to prepare for an assessment?***

The owner is ultimately responsible for ensuring the assessment is completed in accordance with required guidelines and that the final report is submitted to the Office of Drinking Water. There are steps water system owners and operators can take to prepare for a water system assessment to ensure a detailed and useful report is produced.

- As with any other service contract, obtain several quotes and ensure the assessor provides evidence of their qualifications. The Office of Drinking Water website includes links to documents that offer guidance on selecting an engineering consultant or qualified person assessor.
- Review the applicable Terms of Reference or assessment checklist. Not all sections may apply to a water system depending on its components. The Office of Drinking Water website will contain the most up-to-date versions of important documents.
- Consider starting the process by meeting with the assessor to provide general information and water systems records, and to identify a schedule for any on-site inspections and the draft report.
- Provide the assessor with copies of key water system records including:

- General information on the water system (i.e., number of people served, number and types of service connections, age of the key components).
- The system's Operating Licence.
- Relevant design reports, assessments and studies.
- Most recent annual report (public water systems serving 1000 or more persons).
- Correspondence from the Office of Drinking Water from the last three years, such as inspection letters, assessment response letters, annual audits, advisories and the operating licence cover letter.
- Laboratory chemical water quality analysis reports from the last five years.
- Bacterial monitoring summaries for the last three years (request this information from the Drinking Water Officer).
- Operation and maintenance logs for equipment.
- Water use records for the last three years.
- Water treatment manuals, specification sheets, and schematics or drawings.
- Well construction reports (i.e., well logs) for any water supply wells.
- Maps of the distribution system showing the location of service connections, valves, hydrants, flush-outs, nearby sewer pipes or tanks, and monitoring locations.
- List of any on-going or intermittent problems experienced with the water system or concerns identified by water system personnel.
- Information or details for any planned upgrades or expansion.
- Ensure that suitable personnel (i.e., the regular operator for the water system) are present for any on-site inspections and are prepared to discuss system operation and concerns.
- Ensure the assessor becomes familiar with the water system. The assessor is responsible for completing a detailed review of the various components of a water system and providing recommendations to address any deficiencies identified.
- Carefully review the draft report to ensure it is accurate and complete. Consider meeting with the assessor to discuss the findings and recommendations in more detail. It is the assessor's responsibility to highlight critical deficiencies where action is required to ensure the safety of the water supply.
- Start planning for addressing deficiencies. Contact the Approvals Unit to discuss upgrading priorities. If treatment or other major upgrades are necessary, consider expanding the scope of work for the assessor, for example:
  - Conducting a detailed study of a water quality issue (i.e., elevated trihalomethanes (THMs) and haloacetic acids (HAAs)), to identify treatment or management options.
  - Conducting preliminary design of necessary water supply, treatment, storage or distribution system upgrades.
  - Completing the detailed design and approval submission (permit application) for water supply, treatment or distribution system upgrades that do not involve extensive or complex study or design work (i.e., design of a chlorine contact tank system).
  - Identifying basic equipment expansion requirements (i.e., sizing larger pumps).
  - Providing preliminary opinion of the cost for addressing identified deficiencies.
  - Assisting with the development of a Compliance Plan that identifies a schedule of actions that will be taken to meet provincial standards.
  - Assisting with the development of a prioritized schedule of actions to address significant water system deficiencies.
  - Overseeing sampling for non-routine water quality parameters.

- Assisting with the development of written procedures for critical operation or maintenance tasks.
- Once finalized, submit the report. The owner is responsible for ensuring the assessment report is submitted to the Office of Drinking Water. One paper copy and an electronic copy must be submitted along with the signed submission form. A checklist assessment report can be submitted in hand-written format as long as it is legible.

***Further Information***

For general questions, contact the Drinking Water Officer.  
For specific questions, contact the Approvals Unit.

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