

Small Drinking Water Systems Directives: Get to Know the Law

A fact sheet for owners and operators of small drinking water systems.

Small Drinking Water Systems (SDWS) Directives

Did you know that effective December 1, 2008, the Ministry of Health and Long-Term Care (MOHLTC) will have oversight of small drinking water systems (SDWS) in Ontario? The MOHLTC has prepared a brochure – *An Introduction to Operating a Small Drinking Water System* to help you become familiar with the changes to Ontario’s drinking water legislation. Reading this brochure is a good beginning.

Under the Health Protection and Promotion Act, Ontario Regulation 318/08 (*Transitional – Small Drinking Water Systems*) and Ontario Regulation 319/08 (*Small Drinking Water Systems*), you are required to provide users with safe drinking water at all times.

What is a small drinking water system (SDWS) directive?

A “directive” is a document that outlines the operational requirements that must be carried out by the owner/operator of a small drinking water system. This document is issued in accordance with section 7 of Ontario Regulation 319/08 (*Small Drinking Water Systems*). A directive is issued to an owner/operator on completion of a site-specific risk assessment or other inspection

process conducted by a public health inspector (PHI) from the local health unit.

How will the PHI know what operational requirements are necessary for my small drinking water system?

Since there are many types of small drinking water systems, a PHI will conduct a site-specific risk assessment of your system to determine potential risks to users associated with the operation of your small drinking water system. This is done by:

- using a risk categorization (RCat) tool to identify and assess potential risks to users;
- applying a multi-barrier approach to determine any potential risk that may affect the safety of the drinking water if left uncorrected.

Following the site-specific risk assessment, basic operating requirements are set to assist you to adequately maintain and supervise the provision of drinking water to your users. These operating requirements will be provided to you as a written “directive” that specifically apply to your small drinking water system.

What is the risk categorization (RCat) tool and how does it work?

The RCat tool was developed by the Ministry of Health and Long-Term Care (MOHLTC) specifically for site-specific risk assessments of small drinking water systems. This tool assesses all parts of the small drinking water system from source water to water available at the tap to users by applying the steps of a multi-barrier approach to protect drinking water.

At the end of the risk assessment, your SDWS will be assigned one of the following risk categories for the system as a whole:

- High** = Significant level of risk
- Moderate** = Medium level of risk
- Low** = Negligible level of risk

What are some of the actions or requirements that are included in a directive?

Under section 7 of Ontario Regulation 319/08, a PHI will issue a directive which may relate to any of the following or other subjects:

- your water sampling and testing frequency, location and method
- the types of samples to be taken
- the need for treatment and treatment equipment
- operational checks
- record maintenance
- posting warning signs; and
- appropriate training for owners/operators.

1. Frequency, location and method of sampling and testing

Ontario Regulation 318/08 (*Transitional – Small Drinking Water Systems*) and Ontario Regulation 319/08 (*Small Drinking Water Systems*) both require that as the operator of a SDWS you must sample and test your water at a minimum frequency through a laboratory licensed by the Ministry of the Environment.

Furthermore, to determine any additional sampling and testing requirements for your SDWS under Ontario Regulation 319/08, the PHI will consider factors such as:

- the risks identified by the RCat tool during the site-specific risk assessment of your SDWS;
- the provision of treatment to your SDWS;
- the protection of the source or distribution system.

Depending on the inspection findings, the PHI's directive may establish:

- your sampling frequency, which may vary depending on the risks and complexity of your SDWS;
- the location(s) in the drinking water system from which samples must be collected (e.g., at the tap if you use a simple system or from the distribution system);
- the sampling techniques to use (e.g., a grab sample or continuous monitoring for testing of chlorine residual).

2. Types of samples to be taken

All SDWS owners/operators will be required to collect samples for the following microbiological agents: *Escherichia coli* (*E. coli*) and total coliforms. Based on the site-specific

risk assessments, some owner/operators may also be required to collect samples and test the water for other parameters such as:

- chemical (fluoride, lead or nitrate) or radiological contaminants (uranium);
- any other parameters (e.g., testing for viruses or parasites or specific chemicals).

3. Provision of treatment

Ontario Regulation 319/08 requires that water be treated if the small drinking water system obtains water from a raw water supply that is surface water.

- The PHI's directive may require you to install treatment equipment on the SDWS, which may include any combination of the following:
- primary disinfection and/or secondary disinfection; and
- filtration.

You may also be required to operate treatment equipment within parameters specified by the PHI.

4. Performance of operational checks

The PHI's directive may also require you to perform specific operational tests. For example, you may be required to:

- conduct turbidity tests; or
- measure disinfectant levels.

5. Maintenance of records

The PHI may require that you maintain records of operational and maintenance tests and related issues for your small drinking water system. For example, you may be required to maintain records of:

- The test results for any of the following standards: microbiological (e.g., E. coli) chemical (e.g., nitrate) or radiological (uranium) parameters;
- Free available chlorine residual reading for primary or secondary disinfection;
- Turbidity levels;
- Equipment failures; and
- Corrective actions taken to respond to any adverse test results or adverse observations.

6. Posting of Warning Signage

- The PHI's directive may require you to post and maintain warning signs to notify users not to consume water from the SDWS. The PHI may specify where the signs must be posted.

7. Training

As the operator of a SDWS, you should be trained in the operation of the system for which you are responsible. The PHI will determine whether the type of training you have is appropriate and may recommend that you obtain additional training.

Specifically, the PHI's directive may require you to:

- Have a personal consultation with a PHI or local board of health staff;
- Review educational material provided by your local board of health staff;
- Receive training provided by equipment or treatment system providers;
- Receive other training approved by the Ministry of the Environment; or



- Meet other training requirements specified by the PHI.

What can I do if I do not agree with the requirements issued in a directive?

Under section 38 of Ontario Regulation 319/08, you have seven days after a directive or an amendment to a directive to request a review by the local medical officer of health. If you and the PHI have a disagreement about the requirements issued in a directive, you should first discuss the matter with the PHI. If you are not satisfied with the outcome of this consultation, then the SDWS owner may file for a review in writing to the MOH of the health unit where you operate your SDWS.

Your written request for a review must include the following:

- the portions of the directive or of the amendment to a directive that you want to be reviewed;
- any submission that you would like the MOH consider in the review;
- a current mailing address so that the MOH can provide you with his or her decision in respect of the review.

If you are considering seeking a review, you should refer to Ontario Regulation 319/08 for the complete details of the review process.

Where can I find additional information?

Please remember...

This fact sheet is only a summary of your responsibilities as the owner or operator of a SDWS and is not a substitute for legal advice. For a more complete understanding of your legal responsibilities as an owner or operator, refer to

Ontario Regulation 318/08 and Ontario Regulation 319/08 or any directives issued on your system.

In addition, you should become familiar with the procedure documents produced to help you efficiently operate a SDWS:

- *Procedure for Disinfection of Drinking Water in Ontario.*
- *Procedure for Corrective Action for Small Drinking Water Systems that are Not Currently Using Chlorine.*

For general information about well water safety, ask your health unit staff for a copy of:

- *Keeping Your Well Water Safe to Drink: An information kit to help you care for your well.*

You may also find additional information on the following Ontario ministry websites:

Acts and Regulations:

www.e-laws.gov.on.ca/index.html

Ministry of Health and Long-Term Care (MOHLTC):

www.health.gov.on.ca

- Current list of local public health units:

www.health.gov.on.ca/english/public/contact/phu/phuloc_mn.html

Ministry of the Environment (MOE):

www.ene.gov.on.ca/en/index.php

- Current list of licensed private laboratories:

www.ene.gov.on.ca/en/water/sdwa/licensedlabs.php

Ministry of Agriculture, Food and Rural Affairs (OMAFRA):

www.omafra.gov.on.ca/english/

