

Small Drinking Water Systems

Newsletter

Spring 2018 | Issue 2



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Welcome Back!

This is issue #2 of the *Small Drinking Water Systems Newsletter*, a newsletter designed to remind Small Drinking Water System owners and operators of the requirements of Ontario Regulation 319 under the Health Protection and Promotion Act.

The goal of each issue is to highlight certain aspects of the regulation and describe how an owner can put into practice these regulatory requirements.

It is our hope that this information will be useful to you. Your feedback is welcome and encouraged.

If you have questions about your drinking water system and requirements, contact your area Public Health Inspector.

If you have feedback regarding this newsletter, contact Renee Duval, Public Health Inspector. Safe Water Program Lead. duvalr@timiskaminghu.com or 1-866-747-4305, Ext. 2241.

Warning Signs: Follow these requirements

Warning signs are only permitted if specified in the Directive document or in response to an adverse test result

Owners/operators who are required to post warning signs, are also required to do the following:

1. The owner(s) and the operator(s) shall ensure that,
 - a) **every time the warning signs are checked, a record is made** of the date and time and of the name of the person who performed the check; and
 - b) the records referred to in clause (a) are kept for at least five years at a location where they can conveniently be viewed by any person listed in subsection 41 (1) of the *Health Protection and Promotion Act* who is inspecting the warning notices.



2. The warning signs must be in the form provided by the health unit. If more signs are needed, please contact a public health inspector.
3. The owner(s) and the operator(s) **shall post and maintain warning signs** at every location in the small drinking water system that has a service connection, tap or other water delivery device which might permit human consumption of the water which signage instructs the users of the system not to use the water for consumption. (O. Reg. 319/08 section 7(6))
4. The owner(s) and the operator(s) **shall ensure that the warning signs are checked at least once a week** to ensure that they are in a good state of repair, easily read, and comply with this requirement.

Attached to this newsletter is a sample template. It will allow you to record all required information to ensure compliance with the regulations.

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www.timiskaminghu.com



Disclosure of Inspection Reports

All health units in Ontario are now required by the Ministry of Health and Long Term Care to publicly disclose all health inspection reports.

This year, the Timiskaming Health Unit will be implementing the disclosure of results of routine and complaint-based inspections of small drinking water systems, as well as drinking water advisories issued for these systems.

Reports will be posted on the health unit's website within 2 weeks of the inspection and will remain on the site for two years for high risk drinking water systems and for four years for all other small drinking water systems.

Reports must contain:

- ✓ type of premises
- ✓ name and address of premises

- ✓ date of inspection
- ✓ type of inspection (eg: routine, re-inspection, complaint-based)
- ✓ risk category of the small drinking water system
- ✓ inspection status (eg: in compliance, found to have minor infractions, found to have critical infractions requiring re-inspection)

Advisories must include:

- ✓ type of premises
- ✓ name and address of the premises
- ✓ date the drinking water advisory was issued
- ✓ reason(s) for the drinking water advisory



UV and Filtration Systems

Ultraviolet disinfection is a well-established method for achieving adequate disinfection of drinking water supplies. Proper design and maintenance of your UV equipment is not only important for treating drinking water – **it is the law!**

Raw water quality needs to be assessed before installing a UV light. Pre-treatment may be required such as cartridge filters, water softeners, and/or tannin filters. Without proper pre-treatment, the UV light may not function properly.

You should always be aware of your own system's maintenance requirements.

Filters need to be changed regularly and as needed based on the source water. Softeners and some filters also need to be serviced. Keep extra filters on-site to ensure no disruption in water supply and to ensure proper water treatment.

The operator must record any UV equipment maintenance, checks and adjustments in a log book that can be inspected by a public health inspector.

Some typical maintenance activities for UV systems include:

- changing your UV bulb;
- cleaning your quartz sleeve;
- confirming your UV alarm and/or automatic shut-off is working;
- cleaning your sensor.

For more information visit:

www.ontario.ca/page/using-ultraviolet-uv-disinfection-drinking-water-systems

Chlorine Residual Testing

Some operators are required to add dilute sodium hypochlorite (chlorine bleach) to the drinking water to maintain a free chlorine residual (FAC) in the distribution system. This will protect users from possible bacterial contamination that could occur in the lines of large systems delivering drinking water over long distances. A minimum FAC concentration of 0.05mg/L is required at all points in the distribution system and must be tested using an electronic direct readout colourimetric or amperometric chlorine analyzer. Pool test kits or DPD colour comparators are not permitted as they do not provide an accurate reading. Samples should be taken from dead-ends or the farthest points in the distribution system to ensure adequate disinfection.

If chlorine levels are chronically low in parts of the distributions system, this could be an indication of a problem. Water lines that get hot in the summer can lead to low chlorine levels. Organic matter and bacterial growth (biofilm) in the lines can increase chlorine demand. Chlorine can evaporate in areas of low use (dead ends). To avoid low chlorine, operators should ensure regular flushing of water lines, prevent stagnant water zones and protect the lines from leaks and possible sources of contamination. Adequate monitoring and maintenance of your drinking water system can prevent any health risks to you and your users.