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Town of Minto Backflow Prevention Program

Background

Following dangerous backflow incidents in Ontario, the Ministry of Municipal Affairs and Housing, in 2014 the Ontario Water Works Association (OWWA) and the Ontario Municipal Water Association (OMWA) developed a Guide for Establishing Backflow Prevention Programs

Cross Connection and Backflow Prevention Program

Minto is committed to supplying consistent and safe drinking water meeting or exceeding regulatory standards. Cross Connection and Backflow Prevention protects drinking water from contamination by making sure pollutants, infectious agents or other materials do not flow backwards into clean water pipes in a drinking water system.

What is back flow?

Back flow is the reversal of the normal direction of water flow in the drinking water system which occurs where a private water system or other device treatment device has a greater pressure than the drinking water system. This can occur two ways:

- 1. **Backpressure:** Water pressure in a building is greater than the municipal drinking water system pressure. This results in the water within that building being forced backward into the drinking water system. These situations can occur in some buildings where water is pumped to appliances or processes, or to upper floors in taller structures.
- 2. **Back Siphonage:** Pressure in the municipal drinking water system is decreased to a negative pressure resulting in the water within the building to be sucked into the drinking water system. Causes include a watermain break, hydrant flushing operations or firefighting operations.



In these instances an unprotected cross connection to the drinking water system can allow pollutants or contaminants to be drawn or forced back into the drinking water piping and distributed throughout the municipal system to other users. This results in unsafe conditions on the property and places the drinking water system, and citizens of the community, at risk.

Typical DCVA - For Reference Only

What is the program about?

The Town wants to work with business and industry to make sure backflow prevention is in place. Industrial, Commercial, Institutional and Multi-residential Properties (more than three levels) that have the potential to cross-contaminate the Town's water system are asked to install backflow prevention devices on all connections coming off the Town water supply line.

Is this mandatory?

Section 8 of Minto's Water By-law 2017-06 makes it illegal for any person to allow pollutants to contaminate the Town's water system through backflow or any other method. This means any water users that pump or processes water within their building, where backflow or siphoning is a risk, must take action to prevent contamination.

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Authorized Town staff members that give proper notice can inspect any premises where municipal water is used to ensure backflow prevention devices are installed, and if they are not installed can order water users to put in the proper control equipment. If non-compliance continues charges and fines are possible. This is a last resort for the Town

How do I know if my business or residential building needs backflow installation?

An initial cross connection survey is required for each building included in the program. This survey must be completed by one of the following:

- A Licensed Plumber with a Backflow Tester's Certificate
- A Professional Engineer with a Backflow Tester's Certificate
- A Certified Engineering Technologist with a Backflow Tester's Certificate

What about private residences?

Some homes should have backflow prevention in place especially home with irrigation systems or with a separate private water system of any kind. Surcharge or siphoning can occur on some appliances especially if poorly maintained or working improperly.

Backflow Device Installation

A building permit with the permit fee is required for the installation of a new backflow prevention device. Replacement of existing testable devices will require a permit if the type, size or location of the device is being changed. The devices must be installed by a licensed plumber, and tested to make sure they work properly. Test results must be reported to the Town within 14 days.



Once installed am I in compliance with the By-law?

The backflow devices will need to testable and tested annually by a Certified Professional who will fill out the required test report and provide a copy to the Town of Minto.

How Does the Program Work?

The following are step by step procedures and contact information for Town staff to assist you with proper backflow prevention installation and maintenance.

Property Owners Step By Step Process

- 1. **Read** the <u>Guide for Establishing Backflow Prevention Programs</u> to find out more about backflow best practices.
- 2. **Hire** a Licensed Plumber, Professional Engineer or Certified Engineering Technologist with a Backflow Tester's Certificate to provide you professional advice and oversee installation.
- 3. Have your licensed professional **complete** a Cross Connection Survey using the Town's form to determine the hazard level associated with your property.
- 4. Once the Town acknowledges approval of the Survey, confirms in writing any required upgrades, and provides a date for installation, have your licensed professional **obtain** a Town

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- permit and install the required device according to specifications and conditions of permit.
- 5. Require your licensed professional **test** the backflow device and within 14 days confirm with the Town the device is functioning who will **inspect** the device. Correct any malfunctions that may be confirmed.
- 6. Ensure the licensed professional **attaches** the completed test tag and files the report within 14 days.
- 7. Have the device **monitored** annually by the licensed professional and file the report with the Town within 14 days of testing each year.

Town Contacts

Water Foreman Wayne Metzger wayne@town.minto.on.ca 519-338-2511 ext 226 Chief Building Official Terry Kuipers terry@town.minto.on.ca 519-338-2511 ext 228 Lead Hand DWQMS Coordinator Todd Rogers todd@town.minto.on.ca 519-338-2511 ext 223 Public Works Assistance Jackie Hymers jackie@town.minto.on.ca 519-338-2511 ext 250

Make an appointment in person at 5941 Highway 89 HARRISTON ON NOG 1Z0

For more information search www.town.minto.on.ca

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