



Hamilton

# INFORMATION REPORT

<b>TO:</b>	Chair and Members Public Works Committee
<b>COMMITTEE DATE:</b>	September 30 <sup>th</sup> , 2019
<b>SUBJECT/REPORT NO:</b>	Backflow Prevention Program and Enforcement Update (PW19085) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
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<b>SUBMITTED BY:</b>	Nick Winters Director, Water & Wastewater Operations Public Works
<b>SIGNATURE:</b>	

## COUNCIL DIRECTION

Not Applicable

## INFORMATION

The Backflow Prevention By-law was approved and passed by City Council on May 12, 2010. The main purpose of this By-law is to prevent the flow of water, other liquids, chemicals or substances from Industrial, Commercial, Institutional and Multi-residential properties back into the drinking water system for which the City of Hamilton (City) is responsible.

Why Backflow Prevention is Important:

Backflow events have the potential to contaminate the water in the City's distribution system, which can cause implications for human health and safety. Canada has a history of backflow incidents highlighting the importance of backflow prevention programs.

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OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

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Oakville, Ontario

In 2011, an Oakville High School had to be closed due to cleaning chemicals entering its water lines. A backflow device successfully prevented any impact to the local water supply.

Stratford, Ontario

In 2005, Stratford residents discovered pink tap water following a backflow event at a local car wash. Residents of Stratford went without water for two days.

Edmonton, Alberta

In 2002, an Edmonton high rise had blue caustic water flowing from the taps. The cause was backflow from the heating system after repairs to internal water lines. The issue took two weeks to correct.

Guelph, Ontario

In 1997, petroleum chemicals from a local manufacturer entered the municipal water distribution system impacting approximately 50,000 residents. Residents of Guelph were instructed not to drink, cook or bathe in water that came out of their taps, even if boiled.

City staff within the Customer Service and Community Outreach (CS&CO) section of Hamilton Water administers the Backflow Prevention Program which supports the requirements prescribed in the City's Backflow Prevention By-law. This Program includes a webpage dedicated to providing property owners with information on the By-law and their obligations with links to survey and device test report forms.

Our proactive outreach program provides property owners with access to City staff (Backflow Prevention Officers) to assist them with meeting compliance requirements. The Program also includes outreach material and reminder letters designed to educate and assist property owners in meeting program requirements.

To date, City staff have reached out to properties that are required to comply with this By-law numerous times per property (See Appendix "A" to Report PW19085). These attempts to gain compliance have been partially successful. However, we continue to have 894 properties that have not completed Self Assessed Surveys (SAS), 626 that have not completed a Cross Connection Survey (CCS) and 1,570 properties that have not installed a device at their property (See Appendix "B" to Report PW19085).

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Based on the importance of compliance to this By-law and limited response to our repeated attempts to gain compliance from these properties, further enforcement strategies are required in addition to our continued outreach and education.

CS&CO staff have consulted with Legal and Risk Management Services to create a plan for an initial launch of a backflow enforcement strategy which is in accordance with By-law 10-103 Section 6.0 Administration, Enforcement and Penalties. The purpose of this initial launch of enforcement is to provide City Staff with data that will help determine the most efficient and effective strategy based on the amount of resources currently dedicated to this program.

If a Municipal Law Enforcement Officer is satisfied that a contravention of this By-law has occurred, he or she may make an order requiring the person who contravened this By-law or who caused or permitted the contravention or the Owner or occupier of the Property on which the contravention occurred to do the work to correct the contravention.

The initial launch backflow enforcement strategy plan will include, but not be limited to, the following:

<b>Estimated Date</b>	<b>Plan</b>
November 2019 – December 2019	Registered Letters to all non-compliant properties will be sent
January 2020 – March 2020	Order to Comply will be issued to the first group of properties (properties selected randomly from current list of non-compliant properties)
*April 2020	Review and analyze results from initial launch enforcement strategy. Water Turn off process will commence for those properties that have not responded to the Order to Comply
May 2020	Prepare information report to Committee and Council to share results of initial launch

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July 2020	Present Information Report to Council
August 2020	Continue enforcement strategy as reported to Committee and Council in July

\*In the event that the property owner does not respond to the Order to Comply, we will begin the process of shutting off water at such properties. The Order to Comply will contain details for the property owner including timeline for compliance and next steps should compliance not be adhered to.

This enforcement strategy will also include City Staff continuing to provide proactive outreach and education to support these properties in achieving compliance.

A detailed timeline including resources and dates for the initial launch backflow enforcement strategy plan is provided in Appendix "C" to Report PW19085.

**APPENDICES AND SCHEDULES ATTACHED**

Appendix "A" – Historical customer outreach

Appendix "B" – City wide properties Compliance for Surveys and Device Installations

Appendix "C" – Detailed Timeline for Initial Launch Backflow Enforcement Strategy