

Document 3 – Backflow Prevention Program Implementation Plan

Implementation Timelines

The Backflow Prevention Program will be launched in January 2018. Backflow hazards will be addressed within 10 years. Severe hazards will be addressed by June 2020. Most of the moderate hazards will be addressed by December 2025. The final two years will allow time to address any outstanding compliance issues.

The City will issue notifications to 200 property owners per month from January to June 2018. This number will increase to 275 monthly notifications from July 2018 until late 2022. Notifications will be issued to 15,500¹ property owners by the end of year five of the program. Please see table below for a summary of the annual timelines.

Table 1: Backflow Prevention Program Implementation Timelines

Timing	Notifications	Site Surveys	Installations	Annual Testing
Year 1: 2018	2,850			
Year 2: 2019	3,300	2,850		
Year 3: 2020	3,300	3,300	1,200	
Year 4: 2021	3,300	3,300	1,650	1,200
Year 5: 2022	2,950	3,300	3,300	2,850
Year 6: 2023		2,750	3,300	6,150
Year 7: 2024		2,850	3,300	9,450
Year 8: 2025		3,300	2,950	12,750
Year 9: 2026		3,300		15,500
Year 10: 2027		3,300		15,500

Owners of severe hazard properties will have one year to complete a site survey and an additional year to install backflow devices. Owners of moderate hazard properties will

¹ This estimate is based on the number of water billing account holders.

have one year to complete a site survey and two years to install backflow devices. The deadlines are based on the date that the notification is issued. For example:

- An owner of a severe risk property that is notified in January 2018 will need to complete a site survey by January 2019 and install a device by January 2020.
- An owner of a moderate risk property that is notified in January 2021 will need to complete a site survey by January 2022 and install a device by January 2024.

Owners of moderate risk properties that require a significant investment in backflow device installations may request additional time to complete the work. A plan must be submitted by the site survey deadline for review and approval, providing a rationale for the request and demonstrating how installations will be complete by 2027.

Properties that are scheduled for demolition within the implementation timelines may be exempt from the requirements. A demolition plan must be submitted by the site survey deadline for review and approval.

Implementation Priorities

The plan follows a risk-based approach that will address more severe risks before less severe risks. The plan for issuing notifications is described below:

- Properties in the severe hazard category will be notified by property type, in alphabetical order.
- Properties in the moderate-severe, moderate and moderate-minor categories will be notified according to their level of risk.
- The severe and moderate-severe property notifications will be issued within the initial 6 months, at a rate of 200 notifications per month.
- The moderate notifications will be issued over 4.5 years, at a rate of 275 notifications per month.

Table 2: Backflow Prevention Program Implementation Priorities

Property/Building Type²	Degree of Hazard
Aquaculture farm	Severe

² Property/building type groups are established in CSA B64.10. The severe risk properties are listed in alphabetical order. The moderate risk properties have been prioritized by the City of Ottawa.

Property/Building Type ²	Degree of Hazard
Aquarium (Public)	Severe
Asphalt plant	Severe
Auto body shop	Severe
Automotive repair	Severe
Automotive repair shop	Severe
Beverage processing plant (distillery, brewery)	Severe
Blood clinic	Severe
Campsite with RV hook-ups or dump stations	Severe
Carwash	Severe
Chemical plant	Severe
Concrete plant	Severe
Dental surgery facility	Severe
Dock and marine facility	Severe
Dry cleaning plant	Severe
Dye plant	Severe
Exhibition ground	Severe
Film processing facility	Severe
Fish farms or hatchery	Severe
Food processing plant	Severe
Garbage transfer facility	Severe
Hospital	Severe

Property/Building Type²	Degree of Hazard
Laboratory	Severe
Laundry (commercial)	Severe
Meat packing plant	Severe
Medical clinic (surgical)	Severe
Milk processing plant	Severe
Mining facility	Severe
Mortuary or morgue	Severe
Motorcycle repair facility	Severe
Oil refinery	Severe
Paint manufacturing plant	Severe
Petroleum processing or storage facility	Severe
Pharmaceutical manufacturing facility	Severe
Photo processing facility	Severe
Plants using radioactive material	Severe
Plastic manufacturing plant	Severe
Painting shop	Severe
Plating shop and plant	Severe
Poultry farm	Severe
Power generating facility	Severe
Premises where access is prohibited or restricted	Severe
Printing plant	Severe

Property/Building Type²	Degree of Hazard
Pulp and paper plant	Severe
Radiator shop	Severe
Recycling facility	Severe
Refinery, petroleum processing	Severe
Rendering facility	Severe
Research facility	Severe
Sewage dump station	Severe
Sewage treatment plant	Severe
Steam plant	Severe
Steel manufacturing plant	Severe
Trackside facility for trains	Severe
Wastewater facility	Severe
Wastewater pump station	Severe
Wastewater treatment plant	Severe
Water filling station	Severe
Water treatment plant	Severe
Water treatment pump station	Severe
Zoo	Severe
Industrial and Institutional Premises	Moderate-severe
University	Moderate-severe
Waste Disposal Plant	Moderate-severe

Property/Building Type ²	Degree of Hazard
Marina (pleasure-boat)	Moderate-severe
Fire Station	Moderate-severe
Animal Feed Lot	Moderate-severe
Animal Stock Yard	Moderate-severe
Golf Course	Moderate-severe
Veterinary Clinic	Moderate-severe
Farm	Moderate-severe
Funeral Home	Moderate-severe
Fuel dispensing facility	Moderate
Manufacturing plant (not specified)	Moderate
Laundry (commercial, coin-operated)	Moderate
Multi-service interconnected facility	Moderate
Multi-tenant single-service facility	Moderate
Shopping mall	Moderate
Swimming pool facility	Moderate
Dental office	Moderate
Hair station	Moderate
Arena	Moderate
Restaurant	Moderate
Penitentiary	Moderate
Airport	Moderate

Property/Building Type²	Degree of Hazard
Apartment building*	Moderate
Office Building	Moderate
Motel	Moderate
Nursing Home	Moderate
Kennel	Moderate
Medical clinic (non-surgical)	Moderate
College	Moderate
School (elementary, junior high, senior high)	Moderate
Water Park	Moderate
Grocer	Moderate
Mobile Home Park	Moderate
Auto Dealership	Moderate
Campsite	Moderate
Commercial Premises	Moderate-minor
Church	Moderate-minor

*Apartment buildings will include multi-residential buildings that are over three stories or have a footprint over 600 m² (or 6,458 ft²), which includes Part 3 buildings under the Ontario Building Code, but does not include Part 9 buildings.

Approximately 5,800 apartment building owners will receive a notification. The City's water billing account information does not align with this definition, so some of these buildings may be excluded from the program.

The notifications will clearly communicate which property owners need to comply with the program requirements. It will provide an opportunity for owners to complete the site survey to confirm whether a property should be included or excluded.