



City of Port Moody Cross Connection Control Standards

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Please note that the City of Port Moody’s Cross Connection Control Standards is an organic document, and may change from time to time. Find the most recent copy at www.portmoody.ca/backflowprevention.

1. Introduction and Background

Purpose of This Document

This publication has been created to summarize the City of Port Moody's Cross Connection Control program including applicable bylaws and other initiatives aimed at controlling Cross Connections throughout the City of Port Moody's water distribution system. This document addresses backflow prevention from Industrial, Commercial and Institutional (ICI) properties, multi-unit residential properties with more than four storeys, and buildings owned by the City of Port Moody.

Introduction to Port Moody's Cross Connection Control Program

The City of Port Moody has developed a Cross Connection Control Program in compliance with the Water Supply and Distribution System Bylaw (No. 3026). A Cross Connection Control Program addresses the Backflow threat by establishing responsibilities, operating policies, testing and reporting procedures. The Program tracks Backflow Preventers directly connected to the City of Port Moody's water distribution system to ensure that they remain in proper working order.

Submission of annual Backflow Assembly Test Reports applies only to Backflow Preventers which provide Premise Isolation.

All Backflow Preventers discussed in this document refer to Premise Isolation devices only. Backflow Preventers providing in-premise protection shall be installed and maintained in accordance with the BC Plumbing Code. Annual inspection reports for in-premise protection do not need to be filed with the City of Port Moody as part of this Program.

Objectives

The objective of the City of Port Moody's Cross Connection Control Program is to provide all residents and businesses with access to clean and safe drinking water. The Cross Connection Control Program aims to ensure the City of Port Moody's water distribution system is protected from accidental contamination due to backflow occurrences by requiring property owners to follow best practices and standards to prevent backflow.

The program also maintains a list of certified Backflow Assembly Testers to ensure that Backflow Preventers are being tested by certified testers using regularly calibrated testing equipment.

Bylaw and Authority

The City of Port Moody's Cross Connection Control Program receives its authority from the Water Supply & Distribution System Bylaw which regulates extensions, connections, and use of the City of Port Moody's water works system. All fees set out in the City of Port Moody Fees Bylaw (No. 3022), are payable at the Customer's sole expense and within the timelines established by the City of Port Moody. The City of Port Moody's Cross Connection Control Program will be structured to allow for updates in this Cross Connection Control Standard.

2. Definitions (Including Abbreviations)

Term	Definition
Approved Backflow Prevention Device	A Backflow Preventer that meets the standard established in the most current edition of the British Columbia Plumbing Code.
AWWA	American Water Works Association.
Backflow	The flow of water or other liquids, gases, or other matter from any source in a backward or reverse direction towards a private water system or the City of Port Moody's Water System.
Backflow Assembly Tester	A person holding a valid certificate from the American Water Works Association, British Columbia Section, for testing backflow prevention assemblies.
Backflow Assembly Test Report	A form provided by, or approved for use by, the City of Port Moody to record all pertinent information and test data when testing backflow prevention assemblies.
Backflow Preventer	A device that prevents the backflow of, or reversal of, the normal direction of flow of water.
BCWWA	British Columbia Water & Waste Association.
Contaminant	Any physical, chemical, biological, or radiological substance or matter in water which may render the water non-potable under the Drinking Water Protection Act or other Provincial laws, or that may otherwise compromise its safety.
Cross Connection	Any actual or potential physical connection whereby the City of Port Moody's Water System is connected, directly or indirectly, with any unapproved private water supply system, sewer, drain, conduit, well, pool, storage reservoir, plumbing fixture, or other source of contaminated water, liquid, gases, sewage, or other waste or contaminant.
Customer	The owner or occupier of real property, or an agent acting on behalf of the owner or occupier.
Degree of Hazard	Hazards shall be divided into the following three categories <ol style="list-style-type: none"> a) Minor hazards – any Cross Connection or potential Cross Connection that constitutes only a nuisance, with no possibility of any health hazard. b) Moderate Hazards – any minor hazard that has low probability of becoming a severe hazard. c) High or Severe Hazard – any Cross Connection or potential Cross Connection involving any substance that could be danger to health.
Potable Water	Water safe for human consumption.
Premise Isolation	A backflow prevention device located at the property line or water service entrance of a building or facility.

3. Responsibilities of the Water Purveyor – the City of Port Moody

Program Implementation

The City of Port Moody has implemented the Cross Connection Control Program, which currently applies to the following types of buildings:

- all City of Port Moody owned facilities;
- Industrial, Commercial, and Institutional (ICI) buildings; and
- multi-residential buildings four stories and greater.

As of July 2016, all municipal buildings, parks and irrigation systems owned by the City of Port Moody have been surveyed for Cross Connections and deficiencies identified have been rectified. The City of Port Moody will continue to adhere to all standards, guidelines and codes as described in this document. All Backflow Preventers located in municipal buildings, parks, and irrigation systems owned by the City of Port Moody will be maintained and routinely tested.

Record Keeping and Annual Test Reminders

The City of Port Moody has engaged BSI Online to maintain records of Approved Backflow Prevention Devices that require annual testing, as well as annual test results. When an initial Backflow Prevention Device Registration Form is obtained by the City of Port Moody, the information is entered into BSI's database. This information is then used to facilitate the following tasks:

- BSI Online will send the Customer a reminder to test the backflow prevention device a few weeks before the annual anniversary of the date of the original test report, or a date mutually agreed to by the Customer and Program Manager.
- If the Approved Backflow Prevention Device test is not completed by the annual anniversary, BSI Online will send the Customer a "past due" notice and simultaneously notify the City of Port Moody that the Backflow Preventer is overdue for testing.
- BSI Online will also notify the City of Port Moody when a Backflow Assembly Test Report has passed or failed, and when a Backflow Preventer has been replaced.

Customers are able to view test reports and other information concerning their Backflow Preventers via BSI Online's website: <https://www.bsionlinetracking.ca/customer>.

Enforcement and Permits

The City of Port Moody is responsible for enforcing the Cross Connection Control Program and imposing penalties in accordance with the Water Supply and Distribution System Bylaw and the Fees Bylaw. The City of Port Moody is also responsible for issuing plumbing permits for all new installations.

Backflow Preventer Guidelines

The City of Port Moody is responsible for communicating which standards are to be followed by Customers with installation and maintenance of Approved Backflow Prevention Devices.

The City of Port Moody will only approve a Backflow Preventer appropriate for its intended use if it is installed in accordance with the most current edition of the BC Plumbing Code, which lists CSA standard B64.10-11 as the reference standard.

The type of backflow prevention measure required for Premise Isolation shall depend on the Degree of Hazard as set out in the CSA Standard B64.10-11.

4. Responsibilities of the Customer

A summary of the Customer's responsibilities is provided immediately below, with more details following in the rest of this section.

In summary, the Customer is responsible for the following:

- Installing an Approved Backflow Prevention Device in compliance with the latest version of the BC Plumbing Code and standard CSA B64.10-11.
- Registering all existing Premise Isolation Approved Backflow Prevention Devices with the City of Port Moody and completing the Backflow Prevention Device Registration Form.
- Contacting a BCWWA Backflow Assembly Tester to perform annual testing on Premise Isolation Backflow Preventers and submitting the report to BSI Online.
- For new construction or changes to the plumbing system in existing buildings, the Customer must obtain a plumbing permit, register all Backflow Preventers with the City of Port Moody Building Department, and register all Premise Isolation devices with the Cross Connection Control Program.
- If a Backflow Preventer is removed, it is the Customer's responsibility to notify the City of Port Moody and fill the appropriate forms.

Control Cross Connections

The Customer is required to ensure that onsite water use and processes do not put the City of Port Moody's water distribution system at risk of any potential contamination. This requirement is a condition of connection to service. The Customer is required to adhere to the BC Plumbing Code for any changes to plumbing in their building and for controlling cross-connections through the installation, testing and maintenance of approved backflow prevention measures on any temporary or permanent connection to the water distribution system.

New Installations

All new installations (including new construction or modifications to plumbing systems in existing buildings) require a plumbing permit from the City of Port Moody before work commences. All Backflow Preventers shall be installed in accordance with the plumbing code and CSA Standard B64.10-11.

All Approved Backflow Prevention Devices (either for Premise Isolation or in-premise) in the building must be registered by completing the Backflow Prevention Device Registration Form and submitting it to the City of Port Moody Building Department.

Upon installation, Backflow Preventers for Premise Isolation must be registered under the City of Port Moody's Cross Connection Control Program.

First-Time Device Registration (of an Existing Backflow Preventer)

A first-time device registration and inspection is required for existing Premise Isolation Approved Backflow Prevention Devices located at existing properties.

All first-time inspections shall be completed by a Backflow Assembly Tester certified by the BCWWA. The tester shall confirm that the Backflow Preventer installed provides appropriate backflow prevention for the Degree of Hazard of the property.

Approved Backflow Prevention Devices must be registered by completing the City of Port Moody's Backflow Prevention Device Registration Form, which is to be submitted to the address or email address listed on the form.

A tag shall be installed on each tested Backflow Preventer. The information to be included on the tag is provided in the References section of this booklet.

The Customer is responsible for all fees related to completing the first-time device registration and inspection.

Backflow Device Maintenance and Testing

It is the responsibility of the Customer to complete annual Backflow Assembly Test Reports for all existing registered devices. Annual inspections shall be completed by a Backflow Assembly Tester certified by the BCWWA.

The Customer is responsible for all fees related to completing the annual inspection and reporting to the City of Port Moody.

The City of Port Moody's requirement to report annual inspections as per its Cross Connection Control Program applies only to Premise Isolation Approved Backflow Prevention Devices.

Annual Testing Dates & Reporting

Annual Backflow Assembly Test Reports are due 12 months from the date of the original test report and every 12 months thereafter. Annual test results must be entered online using the City of Port Moody's contractor BSI Online.

A Customer may apply to the Cross Connection Control Program for a change to the annual test date of devices to consolidate test dates for multiple devices within a property and/or coincide with existing maintenance schedules in the facility.

A test conducted before the annual test date may be accepted by the City of Port Moody if the test date is within two (2) months of the annual test date. A test conducted earlier than 2 months will not be accepted unless an application for a change to the annual test date has been filed.

In the event a device fails a test, the Customer must have the Backflow Preventer repaired or replaced as soon as possible. The Backflow Preventer must then be tested again to ensure that it is in proper working order. The test result must be submitted within thirty (30) days of the test date to BSI Online.

The City of Port Moody retains the right to reject submitted Backflow Assembly Test Reports based on errors, omissions or discrepancies. If consecutive errors, omissions or discrepancies are submitted by a Backflow Assembly Tester, the City of Port Moody may refuse to accept test reports from the tester. The City of Port Moody also retains the right to reject annual test reports if they are not submitted via BSI Online.

Customers in non-compliance may be subject to enforcement in accordance with the Water Supply & Distribution System Bylaw and the Fees Bylaw. In the instance of water service disconnection, all Bylaw requirements must be met, and all applicable service charges must be paid prior to the terminated service being restored.

Backflow Prevention Device Removal

It is the Customer responsibility to notify the City of Port Moody when a Backflow Preventer is to be removed. The Customer shall complete the Backflow Device Removal Verification Form and submit it to the City of Port Moody as instructed on the form.

Temporary Connections to Hydrants

Where a temporary water connection to a hydrant is required, no connection shall be permitted unless the connection is protected with a Reduced Pressure (RP) backflow device. As part of the permit process, the Contractor will complete a Backflow Prevention Device Registration Form and certify that the Backflow Preventer is in good working order.

Should a Contractor use a device provided by the City of Port Moody, the Contractor will be required to pay a deposit and use fee in accordance with the most current version of the City of Port Moody Fees Bylaw.

Circumstances where a temporary water connection to a hydrant is required may include: to fill a newly installed water main; to fill water trucks for dust control; to fill street sweepers; and to fill flusher trucks for flushing sewer mains.

Requests for Temporary Water Disconnection

Where a Contractor requests a temporary water disconnection for the purposes of Backflow Preventer installation or repair, the Contractor is required to notify the City of Port Moody Operations Department, by phoning 604-469-4574, at least three (3) days in advance of the required disconnect. Fees for this service will be applicable in accordance with the most current version of the City of Port Moody Fees Bylaw.

Incident Reporting

Customers are required to report backflow incidents to the City of Port Moody by phoning 604-469-4500.

5. References

Test Tag

A tag or label must be securely attached to every assembly containing the following information:

Side A

Name of Owner
Location of Assembly
Cross Connection Protected
Type of Assembly
Manufacturer
Serial #
Size

Side B

Test Date
Tester Initial
Certification #
Company Tested By

It is the responsibility of the certified Backflow Assembly Tester or inspector to ensure that this tag is fully completed after each test with a permanent waterproof pen.

Reference Documents

The following By-laws, codes, and standards shall be referred to as specified in this document.

- British Columbia Plumbing Code
- Water Supply & Distribution System Bylaw
- CSA Standard B64.10-11
- Fees Bylaw

Forms

The following City of Port Moody forms are applicable to the material discussed in this booklet:

- Backflow Prevention Device Registration Form
- Backflow Device Removal Verification
- Plumbing Service Permit Application
- Plumbing Permit Application