

# THE CORPORATION OF THE DISTRICT OF BARRIERE

## CROSS CONNECTION CONTROL PROGRAM AND PROCESS BYLAW NO. 0038, 2009

A Bylaw of the Corporation of the District of Barriere  
(hereinafter called “the District”) to establish a cross  
connection control program and process for the  
District of Barriere.

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WHEREAS, Provincial legislation requires water suppliers to establish regulation to ensure provisions for the elimination and prevention of cross-connections between their potable water and any non-potable sources.

NOW THEREFORE, the Council of the District of Barriere, in an open meeting assembled,  
ENACTS AS FOLLOWS:

### 1. CITATION

The Bylaw may be cited for all purposes as “CROSS CONNECTION CONTROL PROGRAM AND PROCESS BYLAW NO. 0038, 2009” and comes into effect on the date of adoption.

### 2. DEFINITIONS

In this Bylaw:

- 2.1. “Approved Backflow Prevention Assembly” means a backflow preventer that is designed to be tested and repaired in-line and to meet the design and installation criteria requirements of the CSA standards B64.10-01 / Series-01 and the USC FCCCHR approval criteria;
- 2.2. “Authorized Agent” includes a Person, Firm or Corporation representing the District of Barriere by written consent;
- 2.3. “Backflow” The flow of water or other liquids, gases or solids from any source back into the customer’s plumbing system or the District of Barriere waterworks system;
- 2.4. “Backflow Assembly Test Report” means a form provided by or approved for use by the District of Barriere to be used when testing backflow assemblies to record all pertinent information and test data;
- 2.5. “Backflow Assembly Tester” means a person holding a valid certificate from the American Water Works Association, British Columbia Section for testing backflow prevention assemblies and approved by the District of Barriere.
- 2.6. “Backflow Preventer” means a mechanical apparatus installed in a water system that prevents backflow of contaminants into the potable water system;
- 2.7. “Building Inspector: means a person designated by the Council as a building inspector for the District of Barriere to administer the building and plumbing regulations.
- 2.8. “Commercial User” shall mean any user other than residential user.

- 2.9. “Customer” means any person who is the owner or agent for the owner of any premises to which water is supplied from the District of Barriere waterworks system, and also any person who is the occupier of any such premises, and also any person who obtains water from a Fire Hydrant or by any service from the waterworks system;
- 2.10. “Contaminant” means any physical, chemical, biological or radiological substance or matter in water which may render the water non-potable, according to regulations of the Province of British Columbia Drinking Water Protection Act & Regulations;
- 2.11. “Cross Connection” means any actual or potential physical connection whereby the District of Barriere waterworks system is connected, directly or indirectly, with any non-potable or unapproved private water system, sewer, drain, conduit, well, pool, storage reservoir, plumbing fixture, or any other device which contains, or may contain contaminated water, liquid, gases, sewage, or other waste, or unknown or unsafe quality which may be capable of imparting contamination to the public water supply as a result of backflow;
- 2.12. “Cross Connection Control Program” means the District of Barriere Cross Connection Control Program and Guidelines which provide further reference and direction, standard operating procedures, bulletins and other program updates relevant to this bylaw;
- 2.13. “CSA” is the abbreviation for the Canadian Standards Association;
- 2.14. “Discontinue” means to terminate the arrangement between the District of Barriere and the Customer for the supply of water and to Shut Off the service pipe, disconnect it, or remove it;
- 2.15. “District” means the District of Barriere;
- 2.16. “Fire Hydrant Use Permit” means a permit used by the District of Barriere for any Person requesting water from a Fire Hydrant for purposes other than emergency fire protection;
- 2.17. “Inspect” means an on-site review of the water use, facilities, meters, piping, equipment, operating conditions and maintenance records for the purpose of evaluating for conformity with the terms and conditions of this bylaw;
- 2.18. “Owner” means the owner of the Real property assigned under the “*Local Government Act*” and/or Land Registry Act and includes that person’s authorized agent;
- 2.19. “Person” includes a corporation, partnership or party or other legal representative of a person to whom the context can apply according to law and the singular includes the plural and the masculine includes the feminine;
- 2.20. “Potable Water” means water that is fit for human consumption as defined in the Drinking Water Protection Act and Regulations;
- 2.21. “Premises” means any Real property and buildings on it;
- 2.22. “Private Water System” means any privately owned pipe and fittings intended for the delivery or distribution of water within a premise or to a property and includes any

domestic use, irrigations systems, greenhouse and hydroponics system, and any other use of water supplied by the District of Barriere Waterworks System;

- 2.23. “Reclaimed Water System” means treated effluent water system that disposes of water from the Waste Water Treatment Plant;
- 2.24. “Reduced Pressure Backflow Assembly” a backflow preventer consisting of a mechanically independent acting, hydraulically dependant relief valve located in a chamber between two independently operating, force-loaded check valves, the intermediate chamber pressure always being lower than the supply pressure when there is a positive pressure on the supply side. The unit includes properly located resilient-sealed test cocks and tightly closing resilient-seated shut-off valves at each end of the assembly. This device is designed for use under continuous pressure;
- 2.25. “Residential User” means any connection to the District of Barriere waterworks system from a building used exclusively for residential purposes containing not more than two (2) residential units;
- 2.26. “Shut Off” means to turn off the water supply by closing a District of Barriere owned valve or by any other means approved by the District of Barriere;
- 2.27. “Turn On: means to allow the flow of water by opening a District of Barriere owned valve or by any other means approved by the District of Barriere;
- 2.28. “Trustee” means the Trustee of the District of Barriere or any person authorized by the Trustee to act on their behalf;
- 2.29. “USC-FCHR” is the abbreviation for the “University of Southern California Foundation for Cross Connection Control and Hydraulic Research”. A testing and approval agency providing a list of approved backflow prevention assemblies;
- 2.30. “Temporary Use of the District of Barriere Fire Hydrant and Application” a water operations policy that outlines the guidelines to be followed when a request is received for temporary use of fire hydrants;
- 2.31. “Used Water” means any potable water which is no longer in the waterworks distribution system including potable water that has moved downstream or past the service connection (water meter) and/or the property line to the private water system;
- 2.32. “Water Connection” means a connection of at least three-quarter inch pipe connecting to a main supply line and extending to the property line for the purpose of conveying water to the said property, and may not include a water meter but shall include a shut-off valve;
- 2.33. “Water Service” means works and services provided by the District and include;
  - 2.32.1. supply for consumption or other use
  - 2.32.2. water connection installation, repair or replacement
  - 2.32.3. water main extension
- 2.34. “Water System” means the District of Barriere water distribution system;

### **3. WATER SUPPLY AND PRESSURE**

- 3.1. The District of Barriere does not guarantee pressure or continuous supply of water, or accept responsibility at any time for the maintenance of pressure in its water mains or for increases or decreases in pressure. The District of Barriere reserves the right at any and all times, without notice, to change operating water pressure and to shut off the water supply for the purposes of making repair, extensions, alterations or improvements, or for any other reason, or to increase or reduce pressure.
- 3.2. The District of Barriere, its officers, employees or agents shall not incur any liability of any kind what so ever by reason of the cessation in whole or in part of water pressure or water supply, or changes in operating pressures, or by reason of the water containing sediments, deposits, or other foreign matter.
- 3.3. Where steam or hot water boilers or other equipment is fed with water by pressure directly from the waterworks system, the District of Barriere shall not be liable for any injury or damage which may result from such pressure or from lack of such pressure or any injury or damage resulting from the improper installation of a backflow preventer.

### **4. INSPECTION**

- 4.1. The District of Barriere and/or a Building Inspector shall be entitled, at its determination to:
  - 4.1.1. Access the private water system located on private property at all reasonable hours in order to carry out inspections and surveys of the premises to determine the existence of connections or cross connections prohibited by this bylaw and as stated in the District of Barriere cross-Connection Control Program.
  - 4.1.2. Impose minimum standards that must be met and satisfied relating to the type of backflow preventer and the installation and maintenance of the same as specified by the District of Barriere Cross Connection Control Program.
  - 4.1.3. Inspect the type of backflow preventer, the installation and state of maintenance and repair of the same;
- 4.2. No person shall turn on a waterworks valve to provide water service to the occupants of any newly renovated or constructed or reconstructed Premise(s) until the private water system in such premise(s) has been inspected for Cross Connections and approved by the Building Inspector and/or the District of Barriere.

### **5. CONDITION OF SERVICE**

- 5.1. Water Service supplied by the District of Barriere waterworks system to a customer shall only be provided where, in the opinion of the District of Barriere, the waterworks system has been effectively protected from any actual or potential cross connections existing at or within the customer's private water system.

## **6. CONTAMINATION**

Subject to provisions of this Bylaw:

- 6.1. No person shall create a cross connection by connecting, causing to be connected or allowing to remain connected to the District of Barriere waterworks system any device, piping, fixture, fitting, container, appliance or any other chattel or thing which may under any circumstances allow non-potable water, used water, wastewater or any chemical, liquid, gas or other substance to enter the waterworks system.

## **7. CROSS CONNECTIONS AND BACKFLOW PREVENTION**

- 7.1. No owner or other person shall permit the introduction of any contaminant or foreign matter whatsoever into any private water system that is connected to the waterworks system.
- 7.2. Where the District of Barriere or Authorized Agent determines that there exists a connection or cross connection prohibited by this Bylaw and/or the District of Barriere Cross Connection Control Program, written notice may be given to the customer to correct the connection or cross connection at the expense of the customer within the time specified in the notice.
- 7.3. A customer to whom notice has been given under this section shall correct the connection or cross connection by installing an Approved Backflow Prevention Assembly conforming to the CSA Standards B64.10-01/B64.10.1-01 or most current edition, for the selection, installation, maintenance and field testing of backflow preventers and as described in the District of Barriere Cross Connection Control Program (Policy).
- 7.4. The owner or customer shall install a type of backflow preventer commensurate to the degree of hazard and that is approved by the District of Barriere on the private water system at the location of the service connection from the waterworks system or other location(s) approved by the District of Barriere.
- 7.5. Notwithstanding anything contained herein if, in the opinion of the District of Barriere, the configuration of any water connection that creates a high risk of contamination to the waterworks system, the customer, shall install on the private water system at the location of the Assembly, in addition to any backflow preventers installed in the customer's private water system at the source of the potential contamination.
- 7.6. The failure to be sent a notice(s), or the failure to receive a notice(s), shall not excuse the mandatory duty of the premise owner or other responsible party to comply with this Bylaw and/or the District of Barriere Cross Connection Control Program and all other applicable bylaws.
- 7.7. Where any condition is found to exist which, in the opinion of the District of Barriere, constitutes a cross connection with the waterworks system, the District of Barriere or Trustee shall either:

- 7.7.1. Shut off the water supply services(s) to the premises and notify the owner or customer that an approved backflow prevention assembly(s) shall be properly installed and tested at the expense of the owners or customer proper to the water service(s) being turned on;
  - 7.7.2. Give notice to the owner or customer to correct the cross connection(s) at the expense of the owner or customer within a specified period. If the notice is not complied with, the District of Barriere may then discontinue water service or services;
  - 7.7.3. Install an approved backflow prevention assembly at the service connection with all costs being charged to the owner or customer.
- 7.8. Any person whose water has been turned off pursuant to this Bylaw shall not have the water from the District of Barriere waterworks system turned on until all requirements of the District of Barriere have been met and the owner or customer has paid to the District of Barriere all costs associated with the shut off/turn on of water service, the cleanup of contamination and the customer's default under this section has been remedied.

## **8. TESTING AND MAINTENANCE OF BACKFLOW PREVENTION ASSEMBLIES**

- 8.1. The owner or customer will provide to the District of Barriere within thirty (30) days of initial installation, repair or relocation of an approved backflow prevention assembly a backflow assembly test report from a Certified Backflow Assembly Tester confirming the following:
  - 8.1.1. The installation date of the Approved Backflow Prevention Assembly;
  - 8.1.2. The specific location of the assembly and what cross connection or hazard it is intended to isolate;
  - 8.1.3. The manufacturer, model, size and serial number of the backflow preventer installed; and
  - 8.1.4. That it is an approved backflow prevention assembly, installed correctly and in proper operating condition.
- 8.2. Approved backflow prevention assemblies are required to be inspected and tested by a certified Backflow Assembly Tester at least once in every twelve (12) month period or more often if required by the District of Barriere.
- 8.3. Where an owner or customer fails to have an Approved Backflow Prevention Assembly tested, the District of Barriere may notify the owner or customer that the backflow assembly must be tested with ninety-six (96) hours, or within a specified period. If the customer fails to comply with such notice the District of Barriere or Trustee shall discontinue the water service or services and may be subject to penalties listed under this Bylaw.
- 8.4. Where there is a visible or other indication that a backflow preventer is malfunctioning, it is the responsibility of the owner or customer to immediately notify the District, and is further to stop using the private water system until the backflow preventer is replaced or

repaired or re-tested. This includes but it is not limited to damage by: freezing, hot water, fire or otherwise due to neglect.

## **9. COMMERCIAL AND AGRICULTURAL IRRIGATION USE AND TURN ON**

- 9.1. Where a cross connection exists between the District of Barriere waterworks system and a private water system, in addition to the general provision stated in this bylaw, the owner or customer shall also comply with the following:
  - 9.1.1. No person except the duly authorized agents of the District of Barriere shall turn on an agricultural irrigation system.
  - 9.1.2. Prior to commencement of operation of the private water system in each irrigation season, the owner or any person operating a commercial or agricultural irrigation shall have the Approved Backflow Prevention Assembly inspected and tested, at the customer's expense, by a certified Backflow Assembly Tester. A copy of the test report shall be provided to the District within thirty (30) days of completion of the test.
  - 9.1.3. An Approved Reduced Pressure Backflow Assembly (RPBA) shall be used whenever fertilizers, chemicals or any other substance detrimental to health are introduced to a Private Water System.

## **10. TEMPORARY SERVICE CONNECTION AND FIRE HYDRANT USE**

- 10.1. No person shall connect, cause to be connected, or allow to remain connected, any piping, fixture, fitting, container or appliance to a Fire Hydrant, stand pipe or any other temporary service connection:
  - 10.1.1. In a manner which, under any circumstances, may allow water, wastewater or any liquid or substance of any kind to enter the District of Barriere Cross Connection Program; and
  - 10.1.2. Without using an Approved Backflow Prevention Assembly which has been approved and installed in accordance with the District of Barriere Cross Connection Program; and
  - 10.1.3. Without first obtaining a Fire Hydrant Use Permit.
- 10.2. Any person who violates this section will be refused access to water service through the use of a Fire Hydrant or temporary service connection and may be subject to penalties listed under this Bylaw.

## **11. AUXILIARY WATER SUPPLIES**

- 11.1. No connection shall be installed or maintained whereby water from an auxiliary water system may enter the waterworks system or customer's private water system unless such auxiliary water system and the method of connection and use of such system have been approved by the District.

## 12. PENALTY SECTION

- 12.1. Every person who disobeys or fails to comply with any provision of this Bylaw shall be guilty of an offence and liable on summary conviction to a fine not exceeding Four Thousand Dollars (\$4,000) or to imprisonment not exceeding six (6) months, or both and if the offence is of a continuing nature, to a fine not exceeding Five Hundred Dollars (\$500) for each day the offence is continued.

Read for a first time this 20th day of April, 2009.

Read for a second time this 20th day of April, 2009.

Read for a third time this 20th day of April, 2009.

**Adopted this 4th day of May, 2009.**

The Corporate Seal of **THE CORPORATION OF  
THE DISTRICT OF BARRIERE** was affixed in the presence of:

Original Signed by Mayor Fennell  
Mike Fennell - Mayor

Original Signed by Wayne Vollrath  
Wayne Vollrath, CAO