CITY OF CASTLEGAR

BYLAW 1014

City of Castlegar elimination and prevention of cross-connections bylaw.

WHEREAS, Provincial legislation requires water purveyors 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 City of Castlegar, in open meeting assembled, ENACTS AS FOLLOWS:

- This Bylaw may be cited for all purposes as "City of Castlegar Cross Connection Control Bylaw No. 1014, 2004".
- 2. In this Bylaw:
 - "Approved Backflow Prevention Assembly" means a backflow preventer designed to be tested and repaired in-line and to meet the head loss and flow requirements of the recognized approval agency.
 - "Authorized Agent" includes a Person, Firm or Corporation representing the City of Castlegar by written consent.
 - "Backflow" means the reversal of flow from the private water system to the Water Authority's Waterworks System.
 - "Backflow Assembly Test Report" means a form provided by or approved for use by the City of Castlegar to be used when testing backflow assemblies to record all pertinent information and test data.
 - "Backflow Assembly Tester" means a person holding a valid certificate from the American Water Works Association, British Columbia Section for testing backflow prevention assemblies.
 - "Backflow Prevention Device" means a backflow preventer that does not meet the approval requirements of an "assembly" and can be used as a secondary line of defence for the prevention of backflow.
 - "City" shall mean the City of Castlegar.
 - "Commercial User" shall mean any user other than a residential user.

- "Consumer" means any person who is the owner or agent for the owner of any premises to which water is supplied from the waterworks, and also any person who is the occupier of any such premises; and also any person who is actually a user of water supplied to any premises or by any service from the waterworks.
- "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.
- "Cross Connection" means any actual or potential physical connection whereby the Water Authority's water supply is connected, directly or indirectly, with any non-potable or unapproved private water supply 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.
- "Cross Connection Control Policy" means the City of Castlegar Cross Connection Control Program Policy which provides further reference, direction, standard operating procedures, bulletins and other program updates.
- "Director of Transportation & Civic Works" means the person appointed by the Municipal Council as such and includes employees of the City of Castlegar and agents authorized by the City of Castlegar when acting under the direction of the Director of Transportation & Civic Works.
- "District" shall mean the Municipal Area comprised within the boundaries of the City of Castlegar.
- "Owner" means the definition assigned under the "Community Charter".
- "Person" includes a corporation, partnership or party and the personal 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.
- "Potable Water" means water that is fit for human consumption as defined in the British Columbia Drinking Water Protection Act and Regulation.
- "Premise" means any real property and buildings on it.

- "Private Water System" means a water system privately owned or operated for the delivery or distribution of water and includes any domestic use, irrigation system, greenhouse and hydroponics system, and any other use of water supplied by the Water Authority's Waterworks System.
- "Shut Off" means to turn off the water supply by closing a Water Authority owned valve or by any other means approved by the Trustee.
- "Turn On" means to allow the flow of water by opening a Water Authority owned valve or by any other means approved by the Trustee.
- "Trustee" means the Trustee of the Water Authority or any person authorized by the Trustee to act on their behalf.
- "Water Authority" includes any municipality, regional district, improvement district, irrigation district, water users community, water works district, water utility and any other corporation that have the authority to supply water for the purposes of domestic, irrigation or other uses as reflected in the "operating permit".
- "Water Authority's Waterworks System" means the City of Castlegar Waterworks System.
- "Water Service" means the supply of water by means of the waterworks.
- "Waterworks" means the waterworks systems of the City of Castlegar.
- 3. Subject to the provisions of Section 4 and 5 of this Bylaw:
 - No person shall create a cross connection by connecting, causing to be connected, or allowing to remain connected to the Water Authority's Waterworks System and device, piping, fixture, fitting, container, appliance or any other chattel or thing which may under any circumstances allow non-potable water, waste water or any chemical, liquid or other substance to enter the Water Authority's Waterworks System.
- 4. No owner or operator of a Private Water System connected to the Water Authority's Waterworks System shall permit the creation of a cross connection or the introduction of any chemicals or foreign matter whatsoever into the Private Water system except upon strict compliance with the following:

- 4.1 The owner or operator of the Private Water System shall install a type of backflow preventer approved by the Water Authority on the water system at the location of the service connection from the Water Authority or another location approved by the Water Authority.
- 4.2 Where the Water Authority determines that there exists a connection or cross connection prohibited by this Bylaw, he may give written notice to the Consumer to correct the connection or cross connection at the expense of the Consumer within the time specified in the notice.
- 4.3 A Consumer 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 Cross Connection Control Committee Pacific Northwest Section AWWA manual (current edition) and/or the Canadian Standards Association Standard B64.10 (current edition).
- 4.4 The owner or operator will provide to the Water Authority within thirty (30) days of initial installation of the backflow prevention assembly a certificate from a certified Backflow Assembly Tester confirming:
 - 4.4.1. The date of installation for the backflow prevention assembly.
 - 4.4.2 The specific location of the assembly and what cross connection it is intended to isolate.
 - 4.4.3 The manufacturer, model, size and serial number of the backflow preventer installed.
 - That it is an approved assembly, installed correctly and in proper operating condition.
- 4.5 The owner or operator of a Private Water System shall have the backflow prevention assembly inspected/tested by a certified Backflow Assembly Tester at least once in every 12 month period or more often if required by the Water Authority. The inspection/test is to confirm that it is an approved assembly, installed correctly and in proper operating condition. If the assembly is found to be faulty, it must be repaired and re-tested. A copy of the test report shall be provided to the Water Authority within thirty (30) days of completion of the test.
- 4.6 No Person shall Turn On a Waterworks valve to provide Water Service to the occupants of any newly renovated or constructed or reconstructed Premises until the plumbing system in such Premises has been inspected for Cross Connections and approved by the Water Authority. (This is in accordance with Section 3 of Water Regulations and Rates Bylaw No. 703.)

- 5. The operator of a Private Water System for agricultural purposes where a cross connection exists between the Waterworks System of the Water Authority and the Private Water system shall in addition to the general provisions of Section 3 also comply with the following:
 - 5.1 An Approved Reduced Pressure Backflow Assembly (RPBA) shall be used whenever fertilizers, chemicals or any other substance deleterious to health are introduced to a private water system.
 - 5.2 Prior to commencement of operation of the Private Water System in each irrigation season, the owner or operator of the Private Water System shall have the backflow prevention assembly inspected/tested by a certified Backflow Assembly Tester to ensure that it is an approved assembly, installed correctly and in proper operating condition. A copy of the test report shall be provided to the Water Authority within thirty (30) days of completion of the test and prior to operation of the chemical injection system.
 - 5.3 It is the responsibility of the owner or operator to ensure that chemicals are registered for the application method being employed and to operate the irrigation and chemical injection system in accordance with the procedures outlined in "Chemigation Guidelines for British Columbia", prepared by the Ministry of Agriculture, Fisheries and Food.
 - 5.4 The owner or operator assumes responsibility for the operation of the irrigation and injection system and shall ensure that proper backflow prevention procedures are used at the connection to the Water Authority's Waterworks System.
 - 5.5 The owner or operator of any sprayer tank filling station shall maintain a minimum air gap of 30cm between the end of the filler hose and the top of the sprayer tank. If this air gap cannot be maintained or if in the opinion of the Water Authority the sprayer filling station is constructed or operated in a manner that constitutes a cross connection with the Water Authority's Waterworks System, the provisions of paragraph 8 shall apply.
- The Water Authority shall be entitled, at its determination to:
 - 6.1 Inspect the Private Water System located on private property at all reasonable hours; (see cross connection control policy Backflow Prevention Section F.2.b.)
 - 6.2 Impose minimum standards which must be met and satisfied relating to the type of backflow preventer and the installation and maintenance of the same.
 - 6.3 Inspect the type of backflow preventer, the installation and state of maintenance and repair of the same.

- 7. Where there is a visible or other indication that a backflow preventer is malfunctioning, it is the responsibility of the owner or operator of the Private Water System to immediately notify the Water Authority, and further, to stop using the Private Water system until the backflow preventer is repaired/re-inspected. This includes but is not limited to damage by freezing, hot water, fire or otherwise due to neglect is the sole responsibility of the owner.
- 8. Where any condition is found to exist which, in the opinion of the Water Authority constitutes a cross connection with the Water Authority's Waterworks system, the Water Authority or any person acting on behalf of the Water Authority shall shut off the water supply service(s) to the property and notify the property owner that an approved backflow prevention assembly(s) shall be properly installed and tested at the property owners expense prior to the water service(s) being turned on. If, in the sole opinion of the Water Authority, a health hazard does not presently exist, the Trustee may give notice to the property owner to correct the cross connection within a specified period.
- Any person whose water has been turned off pursuant to this Bylaw shall not have the water from the Water Authority turned on until such time as:
 - 9.1 All of the provisions of this bylaw have been complied with.
 - 9.2 The said person pays to the Water authority a turn on fee as stated in Schedule "B" of Water Regulations and Rates Bylaw No. 703.
 - 9.3 The Water Authority has turned on the service.
- 10. Every person who violates a provision of this Bylaw, or who suffers or permits any act to be done in contravention or violation of any of the provisions of this bylaw, or who neglects or refrains from doing anything required to be done by this Bylaw, breaches a condition of prevention of cross-connect or any approval issued under this Bylaw, or who fails to comply with an order made under this Bylaw, commits an offence and is liable on summary conviction to a fine of not more than \$2,000 and the costs of prosecution. Each day a violation continues or is permitted to continue may constitute a separate offence.
- 11. This bylaw shall come into full force and effect upon final adoption.

READ A FIRST TIME this 20th day of December, 2004.

READ A SECOND TIME 20th day of December, 2004.

READ A THIRD TIME 20th day of December, 2004.

ADOPTED this 4th day of January, 2005.

Mayor

Director of Corporate Services