

**REGIONAL DISTRICT OF NORTH OKANAGAN
BYLAW NO. 2651, 2014**

CONSOLIDATED FOR CONVENIENCE

This document is an office consolidation of the above-noted Bylaw and includes the amendments listed below. This Bylaw has been consolidated for convenience and is intended for information and reference purposes only. This document is not the official version of the Bylaw. Be advised that plans, pictures, other graphics or text in the official version may be missing or altered in this consolidated version. Where accuracy is critical, please contact the Corporate Services Department at the Regional District of North Okanagan.

TEXT AMENDMENTS

| Bylaw No. | Adopted | Amendment |
|------------------|------------------|---|
| 2683, 2015 | August 19, 2015 | – To amend RDNO Cross Connection Control Regulation Bylaw No. 2651, 2014 to include utilities owned by the RDNO |
| 2696, 2015 | October 21, 2015 | – To amend RDNO Cross Connection Control Regulation Bylaw No. 2651 to add a definition for fire hydrants. |

REGIONAL DISTRICT OF NORTH OKANAGAN

BYLAW No. 2651

A Bylaw to Protect Public Health by Controlling Cross Connections to Water Utilities Owned and Operated by the Regional District of North Okanagan

WHEREAS under Section 796 of the *Local Government Act*, a regional district may operate any service that the board considers necessary or desirable for all or part of the regional district;

AND WHEREAS under Section 523 of the *Local Government Act*, subject to the *Public Health Act*, a regional district board may, by bylaw;

- a) regulate and prohibit for the purposes of maintaining, promoting or preserving public health or maintaining sanitary conditions; and
- b) undertake any other measures it considers necessary for those purposes;

AND WHEREAS the RDNO owns, operates and maintains the RDNO Waterworks System, which currently provides Water Service to the ~~GVW Service Area~~ **Service Area** in accordance with the *Greater Vernon Water Use and Regulation Bylaw No. 2545, 2014*;

AND WHEREAS the Board wishes to protect public health by controlling Cross Connections in all RDNO Waterworks Systems and utilities owned, operated and maintained by the Regional District of North Okanagan;

NOW THEREFORE the Board of the Regional District of North Okanagan in an open meeting assembled hereby enacts as follows:

A. CITATION

1. This Bylaw may be cited as the ***“Regional District of North Okanagan Cross Connection Control Regulation Bylaw No. 2651, 2014”***.

B. PURPOSE

1. The purpose of this Bylaw is to:
 - a. protect the Potable Water supplied by the RDNO against the possibility of contamination, by removing or isolating existing or potential Contaminant sources that may Backflow into the RDNO Waterworks System; and
 - b. provide for the installation, inspection and maintenance of Approved Backflow Preventers and other devices required by the Cross Connection Control Program, so as to systematically and effectively prevent the introduction of Contaminants into the RDNO Waterworks System.

C. INTERPRETATION

1. Words or phrases defined in the *Interpretation Act*, R.S.B.C. 1996, Chapter 238, the *Community Charter*, S.B.C., Chapter 26 or the *Local Government Act*, R.S.B.C. 1996, Chapter 323 shall have the same meaning when used in this Bylaw, unless otherwise defined in this Bylaw.
2. The headings contained in this Bylaw are for convenience only and are not to be construed as defining or in any way limiting the scope or the intent of the provisions of this Bylaw.
3. Any enactment referred to herein is a reference to an enactment of the Province of British Columbia and regulations thereto, as amended, revised, consolidated or replaced from time to time, and any bylaw referred to herein (as may be cited by short title or otherwise) is a reference to a bylaw of the Board, as amended, revised, consolidated or replaced from time to time.
4. If any provision of this Bylaw is held to be invalid by a court of competent jurisdiction, the provision may be severed from the Bylaw, and such invalidity shall not affect the validity of the remaining portions of this Bylaw.

D. DEFINITIONS

In this Bylaw, unless the context requires otherwise:

Alternate Water Supply means any water supply available to the Premises, other than a RDNO Waterworks System.

Approved Backflow Preventer means an apparatus that is approved by the RDNO or its authorized agent for installation in a water system so as to prevent Backflow of Contaminants into the RDNO Waterworks System, and includes Approved Backflow Prevention Assemblies and Approved Backflow Prevention Devices.

Approved Backflow Prevention Assembly means an Approved Backflow Preventer that is designed to be tested and repaired while in service and to meet the design and installation criteria requirements of CSA Standard B64.

Approved Backflow Prevention Device means a non testable Approved Backflow Preventer that meets the design and installation criteria requirements of CSA Standard B64.

Backflow means the reversal of the normal direction of flow from a Private Water System or from a Contaminant source, to a RDNO Waterworks System.

Backflow Assembly Test Report means a record, in the form provided or approved for use by the General Manager, which contains all pertinent information and test data resulting from a Backflow assembly test conducted by a Backflow Assembly Tester in accordance with the provisions of this Bylaw.

Backflow Assembly Tester means a person holding a valid certificate, issued by the British Columbia Water and Waste Association, for testing Backflow prevention devices.

Board means the Board of Directors of the RDNO.

Building Inspector means a person or persons appointed from time to time by the Board as a building inspector.

Bylaw Enforcement Officer means a person or persons appointed from time to time by the Board as a bylaw enforcement officer, or any other person appointed as such by the Board for the purposes of administering, enforcing or carrying out this Bylaw.

Contaminant means any physical, chemical, biological or radiological substance or matter in water which may render the water non-potable, according to the *Drinking Water Protection Act*, S.B.C. 2001, Chapter 9.

Cross Connection means any existing or potential physical connection whereby a RDNO Waterworks System is connected, directly or indirectly, with any Non Potable or unapproved Private Water System, or any sewer, drain, conduit, well, pool, storage reservoir, pond, boiler, plumbing fixture, or any other device which contains or may contain contaminated water, liquid, gases, sewage, or other waste, of unknown or unsafe quality, capable of introducing Contaminants into the public water supply as a result of Backflow.

Cross Connection Control Officer means a person or persons appointed from time to time by the Board as a cross connection control officer.

Cross Connection Control Program means the program developed and operated by the RDNO to administer and regulate the selection, approval, installation, inspection, testing and maintenance of Backflow prevention devices.

CSA means the Canadian Standards Association.

Customer means any person who is the owner or occupier, or agent for the owner or occupier, of any Premises or equipment to which water is supplied by ~~GVW~~ **an RDNO Waterworks System**, and who is liable to pay charges for Water Service, including service from fire hydrants or truck fill stations.

Double Check Valve Assembly or DCVA means a device defined as such in CSA Standard B64.

Fire Hydrant means a water conveyance device where a hose can be attached and supplied water with typically elevated flows for the primary purpose of fighting fires. This definition includes the hydrant, hydrant connection valve, lead and tee at the main and refers to all fire hydrants connected to the Greater Vernon Water system, including fire hydrants on private property.

General Manager means the person appointed to the position of General Manager of Engineering for the ~~Greater Vernon Water Service~~ **for the Regional District of North Okanagan**, and shall include any person designated by the Board to act on behalf of the General Manager.

~~**GVW Service Area** means the area defined as such in *Greater Vernon Water Use and Regulation Bylaw No. 2545, 2014, as amended.*~~

Irrigation Season means the period of time designated as such in the *Greater Vernon Water Use and Regulation Bylaw No. 2545, 2014, as amended.*

Non Potable Water means water that is not fit for human consumption as defined in the *Drinking Water Protection Act*.

Potable Water means water that is fit for human consumption as defined in the *Drinking Water Protection Act*.

Premises means any real property and all buildings and improvements thereon.

Private Water System means any water system, or portion thereof, which is privately owned and operated for the delivery and distribution of water, including, without limitation, domestic or commercial irrigation systems, greenhouse systems or hydroponics systems, and any other domestic or commercial use of water supplied by the RDNO Waterworks System.

RDNO means the Regional District of North Okanagan.

RDNO Officer means a Building Inspector, Bylaw Enforcement Officer or Cross Connection Control Officer., or any other person appointed as an RDNO officer by the Board for the purposes of administering, enforcing or carrying out this Bylaw.

RDNO Waterworks System means any waterworks system *within the Service Area* owned, operated and maintained by the RDNO or its authorized agent, and any and all parts thereof.

Reclaimed Water System means a treated effluent water system that disposes of Non Potable Water from a municipal wastewater treatment facility.

Reduced Pressure Backflow Assembly means a device defined as such in CSA Standard B64.

Service Area means the areas defined as such in the following bylaws as amended:

- **Regional District of North Okanagan – Greater Vernon Regional Water Supply Local Service Establishment Bylaw No. 1262, 1994,**
- **Grindrod Water Local Service Area Establishment Bylaw No. 1414, 1997,**
- **Gunter Ellison Road Water Local Service Establishment Bylaw No. 1600, 2000,**
- **Mabel Lake Community Domestic Water Service Establishment Bylaw No. 1908, 2003,**
- **Whitevale Water System Local Service Area Establishment Bylaw No. 1016, 1992, and**
- **Silver Star Village Local Service Area Conversion and Establishment By-law No. 1082, 1992.**

Service Connection means any connection through means of a pipe, valve, and other appurtenances extending from a RDNO Waterworks System to the boundary of the property being served.

Turn On means to allow the flow of water by opening a RDNO-owned valve, or by any other means approved by the RDNO.

Turn Off means to stop the flow of water by closing a RDNO-owned valve, or by any other means approved by the RDNO.

Used Water means any Potable Water which is no longer in the RDNO Waterworks System, including Potable Water that has moved downstream or past the Service Connection valve and/or the property line to the Private Water System.

Water Service means the supply of water to a Customer by means of the RDNO Waterworks System.

E. APPLICATION

1. This Bylaw applies to all water supplied by the RDNO within the ~~GVW Service Area~~ **Service Area**, and to all persons receiving or using such water.

F. RDNO NOT LIABLE

1. The RDNO shall not be liable for injury, damage or loss to any person or property at any time caused by or resulting from any:
 - a. installation of any Approved Backflow Preventer or other Backflow prevention device;
 - b. increase, reduction or interruption in or loss of water pressure, including, without limitation, any pressure fluctuations due to thermal expansion;
 - c. increase, reduction or interruption in or loss or discontinuance of Water Service or any other water supply; or
 - d. inspection of or failure to inspect any Cross Connection, or from any delivery of or failure to deliver any notice pertaining to an inadequately controlled Cross Connection.

G. CONNECTIONS, CROSS CONNECTIONS AND BACKFLOW PREVENTION

1. All connections between any Private Water System, sewer, drain, conduit, well, pool, storage reservoir, pond, boiler, plumbing fixture, or any other device and a RDNO Waterworks System, must be installed, operated and maintained in compliance with the provisions of this Bylaw and the Cross Connection Control Program.
2. Except as specifically provided in this Bylaw, no person shall create a Cross Connection by connecting, causing to be connected, or allowing to remain connected to a RDNO Waterworks System any device, pipe, fixture, fitting, container, appliance or any other thing which may, under any circumstances, allow Non Potable water, Used Water, wastewater or any chemical, liquid, gas or other substance to enter the RDNO Waterworks System.
3. No person shall do any act or suffer or permit any act or thing to be done which causes or in any way contributes to the introduction of a Contaminant or any other foreign matter into any Private Water System that is connected to a RDNO Waterworks System.
4. Where a connection or Cross Connection exists contrary to the provisions of this Bylaw or the RDNO Cross Connection Control Program, a RDNO Officer may issue an order requiring the Customer to correct or eliminate the connection or Cross Connection within a specified period of time, and without limiting the generality of the foregoing, may order that the Customer:
 - a. install an Approved Backflow Prevention Assembly;

- b. install an Approved Backflow Prevention Device; and/or
- c. undertake such other maintenance, repairs, replacement or other work as may be commensurate with the degree of hazard present,

all, of which shall be installed, undertaken, inspected and reported on in compliance with the provisions of this Bylaw and the Cross Connection Control Program.

5. Notwithstanding any other provision of this Bylaw, where the configuration of any water connection creates a risk of a Contaminant entering a RDNO Waterworks System, a RDNO Officer, in addition to any other penalties or remedies contained in this Bylaw, may issue an order requiring the Customer to correct or eliminate the risk within a specified period of time, and, without limiting the generality of the foregoing, may order that the Customer install on the applicable Private Water System:
 - a. an Approved Backflow Prevention Assembly at the location of the Service Connection; and/or
 - b. an Approved Backflow Preventer at the source of the potential Contaminant.
6. A Customer to whom an order has been issued pursuant to Section G.4 or G.5 of this Bylaw shall comply with the terms and conditions of the order within the specified period of time, failing which, the RDNO, in addition to any other penalties or remedies contained in this Bylaw, may Turn Off the Water Service until such time as the terms and conditions of the order have been satisfied.
7. In the event a Customer's Water Service is Turned Off pursuant Section G.6 of this Bylaw, the Customer may apply to have the Water Service reinstated on the condition that the Customer pays outstanding fines, fees and charges, including all RDNO costs associated with the Turn Off and Turn On, and is otherwise in compliance with this Bylaw.
8. Where there is any indication that an Approved Backflow Preventer is malfunctioning, including, without limitation, damage caused by freezing, hot water, fire, neglect or mistreatment, the Customer shall immediately notify the RDNO, and cease using the Private Water System until the Approved Backflow Preventer is replaced or repaired and re-tested in accordance with this Bylaw.

H. TESTING OF BACKFLOW PREVENTION ASSEMBLIES

1. Upon every installation, repair, replacement or relocation of an Approved Backflow Prevention Assembly, the Customer shall:
 - a. have a certified Backflow Assembly Tester conduct a test of the Backflow Prevention Assembly; and
 - b. within thirty (30) days of such installation, repair, replacement or relocation, provide to the RDNO a completed Backflow Assembly Test Report.
2. At least once in every twelve (12) month period, the Customer shall have a certified Backflow Assembly Tester conduct a test of the Backflow Prevention Assembly, and, within thirty (30) days of such test, provide to the RDNO the completed Backflow Assembly Test Report.

I. AGRICULTURAL IRRIGATION CONNECTED TO POTABLE WATER SYSTEM

1. During the Irrigation Season, the following restrictions and requirements apply to agricultural irrigation connected to RDNO Waterworks Systems delivering Potable Water:
 - a. no person, other than RDNO employees or authorized agents, shall Turn On an agricultural Service Connection;
 - b. prior to the agricultural Service Connection Turn On, the Customer operating the agricultural irrigation system shall have an Approved Backflow Prevention Assembly installed in accordance with this Bylaw; and
 - c. within thirty (30) days of the agricultural Service Connection Turn On, the Customer shall have a certified Backflow Assembly Tester conduct a test of the Backflow Prevention Assembly and within fourteen (14) days of the completion of such test, provide to the RDNO a completed Backflow Assembly Test Report.

J. AGRICULTURAL IRRIGATION CONNECTED TO NON POTABLE WATERWORKS SYSTEM

1. Where the RDNO operates a separated Non Potable Water distribution system and the Premises has at least one Non Potable Service Connection, the Customer shall comply with **one** of the following:
 - a. Install a Double Check Valve Assembly: where the RDNO or its authorized agent requires the installation of a Double Check Valve Assembly, the Customer shall:
 - i. install a Double Check Valve Assembly on the Service Connection for the Potable Water;
 - ii. immediately upon installation, have a certified Backflow Assembly Tester conduct a test of the Double Check Valve Assembly;
 - iii. within fourteen (14) days of such test, provide to the RDNO the completed Backflow Assembly Test Report; and
 - iv. thereafter, conduct testing and reporting as specified by the General Manager;

or

- b. Install a Reduced Pressure Backflow Assembly: where, in the event of severe hazard, the RDNO or its authorized agent requires the installation of a Reduced Pressure Backflow Assembly, the Customer shall:
 - i. install a Reduced Pressure Backflow Assembly on the Service Connection for the Potable Water;
 - ii. immediately upon installation, have a certified Backflow Assembly Tester conduct a test of the Reduced Pressure Backflow Assembly;
 - iii. within fourteen (14) days of such test, provide to the RDNO the completed Backflow Assembly Test Report; and
 - iv. thereafter, have a certified Backflow Assembly Tester conduct a test of the Reduced Pressure Backflow Assembly annually and also within thirty (30) days of the agricultural Water Service Turn On, and provide to the RDNO a copy of

each applicable Backflow Assembly Test Report within fourteen (14) days of completion of the test.

K. ALTERNATE WATER SUPPLY

1. Where the Premises has a Service Connection to the RDNO Waterworks System delivering Potable Water and an Alternate Water Supply, the Customer shall comply with **one** of the following:
 - a. Install a Double Check Valve Assembly on the Potable Water Service: where the RDNO or its authorized agent requires the installation of a Double Check Valve Assembly on the Potable Water Service, the Customer shall:
 - i. install a Double Check Valve Assembly on the Service Connection for the Potable Water;
 - ii. immediately upon installation, have a certified Backflow Assembly Tester conduct a test of the Double Check Valve Assembly;
 - iii. within fourteen (14) days of such test, provide to the RDNO the completed Backflow Assembly Test Report; and
 - iv. thereafter, conduct such testing and reporting as specified by the General Manager;
 - or**
 - b. Install a Reduced Pressure Backflow Assembly: where the RDNO or its authorized agent, due to severe hazard, requires the installation of a Reduced Pressure Backflow Assembly, the Customer shall:
 - i. install a Reduced Pressure Backflow Assembly on the Service Connection for the Potable Water;
 - ii. immediately upon installation, have a certified Backflow Assembly Tester conduct a test of the Reduced Pressure Backflow Assembly;
 - iii. within fourteen (14) days of such test, provide to the RDNO the completed Backflow Assembly Test Report; and
 - iv. thereafter, have a certified Backflow Assembly Tester conduct a test of the Reduced Pressure Backflow Assembly annually and also within thirty (30) days of the agricultural Water Service Turn On, and provide to the RDNO a copy of each such test report within fourteen (14) days of completion of the test.

L. RECLAIMED WATER SYSTEMS

1. A Customer operating a Private Water System with a connection to the Reclaimed Water System shall also be required to comply with the following:
 - a. Prior Approval and Agreement: no person shall install, or permit or allow to be installed any direct connection between a Reclaimed Water System and a RDNO Waterworks System or a RDNO Non Potable Waterworks System unless:
 - i. the Customer has received the prior written approval of RDNO; and
 - ii. the Customer has entered into an agreement on terms and conditions acceptable to the RDNO, for the installation, operation and maintenance of the connection;

and

- b. Install a Reduced Pressure Backflow Assembly: the Customer shall install a Reduced Pressure Backflow Assembly installed on the Potable Water Service Connection, and:
 - i. immediately upon installation, have a certified Backflow Assembly Tester conduct a test of the Reduced Pressure Backflow Assembly;
 - ii. within fourteen (14) days of such test, provide to the RDNO the completed Backflow Assembly Test Report; and
 - iii. thereafter, have a certified Backflow Assembly Tester conduct a test of the Reduced Pressure Backflow Assembly annually, and provide to the RDNO a copy of each such test report within fourteen (14) days of completion of the test.

M. TEMPORARY USE OF FIRE HYDRANTS

1. No person may:
 - a. connect to, cause to be connected to, or allow to remain connected, any piping, fixture, fitting, container or appliance to any fire hydrant or stand pipe;
 - b. use water from a fire hydrant for any purpose other than firefighting; or
 - c. tamper or in any way interfere with a fire hydrant,unless that person has first:
 - d. obtained a Fire Hydrant Use Permit ~~in accordance with Greater Vernon Water Use and Regulation Bylaw No. 2545, 2014~~ **from the RDNO**, as amended;
 - e. installed an Approved Backflow Prevention Assembly;
 - f. caused a certified Backflow Assembly Tester to conduct a test of the Backflow Prevention Assembly; and
 - g. within fourteen (14) days of such test, provide to the RDNO a completed Backflow Assembly Test Report.
2. Any person who violates Section M of this Bylaw may be refused access to Water Service through the use of a fire hydrant or temporary Service Connection, in addition to any other penalties or remedies contained in this Bylaw.

N. FAILURE TO COMPLY WITH TESTING OR REPORTING REQUIREMENTS

1. Where a Customer fails to comply with any testing or reporting requirements contained in this Bylaw, a RDNO Officer, in addition to any other penalties or remedies contained in this Bylaw, may order the Customer to:
 - a. have a certified Backflow Assembly Tester conduct the applicable test within ninety-six (96) hours, or within some other specified period of time; and
 - b. within fourteen (14) days of such test, provide to the RDNO the completed Backflow Assembly Test Report.
2. A Customer to whom an order has been issued pursuant to Section N.1 of this Bylaw shall comply with the terms and conditions of the order within the specified period of time, failing which, the RDNO, in addition to any other penalties or remedies contained in this Bylaw, may Turn Off the Water Service until such time as the terms and conditions of the order have been satisfied.
3. In the event that a Customer's Water Service is Turned Off pursuant Section N.2 of this Bylaw, the Customer may apply to have the Water Service reinstated on the condition that the Customer pays outstanding fines, fees and charges, including all RDNO costs associated with the Turn Off and Turn On, and is otherwise in compliance with this Bylaw.

O. INSPECTIONS AND TESTING

1. No person shall operate a valve in order to provide Water Service to the occupants of any newly renovated, constructed or reconstructed Premises until an RDNO Officer has first:
 - a. inspected the Private Water System in such Premises for Cross Connections; and
 - b. confirmed that all required Backflow Preventers have been installed and tested, in accordance with this Bylaw.
2. RDNO Officers, at any time, may enter into and upon any Premises within the ~~GVW Service Area~~ **Service Area** and access any Private Water System and any other facilities, meters, piping, equipment, operations and maintenance records, for the purpose of carrying out enquiries, investigations, inspections and testing to determine whether the requirements of this Bylaw and the Cross Connection Control Program are being met, including, without limitation, the inspection and testing of any and all Backflow Preventers and any other devices connected or having the potential to be connected to a RDNO Waterworks System.
3. The owner or occupier of the Premises, the Customer or any other person having knowledge of:
 - a. the Premises; or

- b. any devices on the Premises connected or having the potential to be connected to the RDNO Waterworks System,

shall, upon request, give to RDNO Officers such assistance as may be required in carrying out any enquiry, investigation, inspection or test authorized by Section O.2 of this Bylaw.

4. No person may:
 - a. obstruct, hinder or prevent any RDNO Officer from carrying out any enquiry, investigation, inspection or test authorized by this Bylaw; or
 - b. refuse or neglect to give any RDNO Officer such assistance as may be required under Section O.3 of this Bylaw.

P. OFFENCE AND PENALTY

1. Every person who violates any provision of this Bylaw, or who suffers or permits any act or thing to be done in contravention or in violation of any provision of this Bylaw, or who neglects to do or refrains from doing anything required to be done by any provision of this Bylaw, is guilty of an offence against this Bylaw and shall be liable to:
 - a. a ticket and fine as set out in *The Regional District of North Okanagan Ticket Information Authorization By-Law No. 1148, 1993*, as amended;
 - b. on summary conviction, the penalties provided for in the *Offence Act*, and to a fine of not less than \$200.00 for each offence, together with the costs of conviction; or
 - c. any combination of the above.
2. Each day that an offence against this Bylaw continues shall be deemed a separate and distinct offence.
3. Any penalty imposed pursuant to this Bylaw shall be in addition to, and not in substitution for, any other penalty or remedy imposed pursuant to any other applicable statute, law or legislation.

Q. REPEAL

Upon final adoption of this Bylaw the following Bylaws are hereby repealed:

1. "Vernon Irrigation District Backflow Prevention By-law" [VID Bylaw 675, 1989] and amendments thereto; and
2. "GVWU Cross Connection Control Regulation Bylaw No. 2106, 2005" and amendments thereto.

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| Read a First Time | this | 16th | day of | April, 2014 |
| Read a Second Time as Amended | this | 18th | day of | June, 2014 |
| Read a THIRD Time | this | 18th | day of | June, 2014 |
| ADOPTED | this | 18th | day of | June, 2014 |

"R. Fairbairn"
Vice Chair
Rick Fairbairn

"J. Byron"
Corporate Officer
Jeanne Byron