

Reference: CLE-XX-20XX

**THE CORPORATION OF HALDIMAND COUNTY**

By-law Number /XX

DRAFT

**Being a by-law to protect Haldimand County's Water  
Distribution Systems from contamination through Cross  
Connection Control and Backflow Prevention**

**WHEREAS** sections 8, 9, and 10 of the *Municipal Act, 2001*, S.O. 2001, c. 25, (the "Municipal Act, 2001"), authorize Haldimand County to pass by-laws that are necessary or desirable for municipal purposes, and in particular paragraphs 4 through 8 of subsection 10(2) authorize by-laws respecting: public assets of the municipality; economic, social and environmental well-being of the municipality; health, safety and well-being of persons; services and things that the municipality is authorized to provide and protection of persons and property, including consumer protection;

**WHEREAS** section 425 of the *Municipal Act, 2001* authorizes Haldimand County to pass by-laws providing that a person who contravenes a by-law of Haldimand County passed under that Act is guilty of an offence;

**WHEREAS** the *Municipal Act, 2001* further authorizes Haldimand County, amongst other things, to delegate its authority, to impose fees and charges on persons for services or activities provided or done by or on behalf of it, to provide for inspections and inspection orders, and to make orders to discontinue activity or to do work;

**AND WHEREAS** section 446 of the *Municipal Act* authorizes a municipality through by-law to require, in default of a required matter or thing being done, that the work may be done by the municipality at the expense of the person required to do it and the costs may be added to the tax rolls and collected in the same manner as taxes.

**AND WHEREAS** Section 11 of the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, as amended (the "SDWA"), requires every owner and operator of a municipal drinking water system to ensure that all water provided by the system meets the requirements of drinking water quality standards and that the drinking water system is operated in accordance with the *Safe Drinking Water Act*;

**AND WHEREAS** the Council of The Corporation of Haldimand County desires to prevent the flow of water, other liquids, chemicals or substances back into the drinking water system for which the County is responsible;

**NOW THEREFORE, the Council of The Corporation of Haldimand County enacts as follows:**

**1. DEFINITIONS**

In this By-law:

“ASSE” means American Society of Sanitary Engineers;

“Alternate Water Supply” means a water source other than the municipally supplied potable source;

“AWWA” means American Water Works Association;

“Backflow” means the flowing back of, or the reversal of the normal direction of flow of water;

“Backflow Prevention” means the prevention of the flow of water, other liquids, chemicals or substances back into the water being supplied by the County’s Water Distribution System;

“Backflow Prevention Device” means a device that prevents Backflow;

“Building” has the same meaning as set out in the Building Code Act, 1992 S.O. 1992, c.23;

“Building Code” means the Building Code Act, S.O. 1992, c. 23, as amended, repealed or replaced from time to time;

“County” means the Corporation of Haldimand County;

“Cross Connection” means any actual or potential connection between a Potable Water system and any source of pollution or contamination;

“Cross Connection Control Manual” means the AWWA Canadian Cross Connection Control Manual, Edition #1, 2007, as amended from time to time, or successor thereof;

“Cross Connection Survey Form” means the document to be completed by a qualified person, in the form prescribed by the General Manager from time to time;

“CSA Standard” means the CAN/CSA B-64 Series published by the Canadian Standards Association, in effect at the time of the enactment of this By-law, and as amended from time to time, or successor thereof;

“Fire Protection System” means any system within a Building or Structure for the suppression of a fire, including but not limited to any system consisting of a water sprinkler system or dry foam, or a system described in the CSA Standard;

"Water Purveyor" means the General Manager of Public Works Operations for the Corporation of Haldimand County and his or her successors or his or her authorized representative or designate;

"High or Severe Hazard" means any Cross Connection involving any substance that could be a danger to health and includes, but is not limited to, Cross Connections for establishments involving chemical usage, high hazard uses as defined by the Building Code or "high or severe hazard" as defined in the CSA Standard and any use where Backflow Prevention is deemed required by the General Manager;

"Irrigation System" means artificially supplying land with water for agriculture or landscaping, usually by means such as pipes and sprinklers;

"Matter" includes but not limited to water, waste water or any other liquid, chemical or any substance;

"Municipal Water Connection" means the pipe portion of a water service that extends from the municipal water works to a Private Water Connection, commonly located within the limits of the public road allowance or other public land interests held for water purposes;

"Municipal By-Law Enforcement Officer" means a Person or Persons duly appointed by the Council of the Corporation of Haldimand County to enforce the provisions of this by-law, and includes any Police Officer appointed pursuant to the Community Safety and Policing Act, 2019;

"Officer" means a Municipal By-Law Enforcement Officer appointed by Council, whose duties include the enforcement of Haldimand County by-laws, and a Police Officer;

"Owner" means the person or owners of a Property or their authorized agent(s), but does not include a mortgagee unless the mortgagee is in possession of the Property;

"Potable Water" means water that is fit for human consumption;

"Premise Isolation" means the prevention of Backflow into the County's Water Distribution System from an Owner's Building, Structure or Property by the installation of a suitable Backflow Prevention Device at the entrance of such Building, Structure or Property;

"Private Water Connection" means the pipe portion of the water service that extends from the Municipal Water Connection to the premise, commonly located within the limits of the private lands or as defined by the Water Purveyor;

“Property” includes both public and private lands located within the geographic area of the County and includes all buildings and structures;

“Self-Assessed Survey” means the document to be completed by the Owner of the Property, in the form prescribed by the Water Purveyor from time to time;

“Small Private Service” means a Private Service that is less than 50mm in diameter;

“Structure” means anything constructed or built permanently or temporarily which is provided with a source of Potable Water;

“Test Report” means the document to be completed by a qualified person, in the form prescribed by the General Manager from time to time;

“Water Meter” means a device designed and tested to determine the quantity of water entering a Structure through which is owned by the County;

“Water Distribution System” means the buildings, structures, plant, machinery, equipment, appurtenances, devices, conduits, intakes, outlets, underground pipelines and installations, and other works designed for the transmission, distribution and storage of Potable Water by the County, and includes lands occupied for such purposes and uses.

## **2. Application AND INTERPRETATION OF BY-LAW**

2.1 This By-law applies to:

2.1.1 All industrial, commercial, institutional and multi-residential Buildings and Structures, whether existing or proposed, except Buildings with residential occupancies within the scope of Part 9 of the Building Code, located on a Property.

2.1.2 All Buildings and Structures, including residential, directly connected to water mains identified as transmission water mains.

2.2 Despite subsection 2.1, this By-law also applies where the General Manager determines that a condition exists in any Building or Structure which may be hazardous or detrimental to the County’s Water Distribution System.

2.3 In the event of a conflict between the provisions of this By-law and the provisions of any other statute, regulation or by-law, the provisions that are the most restrictive prevail.

2.4 The necessary grammatical changes required to make the provisions of this By-law applicable to corporations, partnerships, trusts and individuals, male or female, and to include the singular or plural meaning where the context so requires, shall in all cases be assumed as though fully expressed.

2.5 The insertion of headings and the division of this By-law into sections and subsections are for convenience of reference only and shall not affect the interpretation thereof.

2.6 Any reference in this By-law to any statutes, regulations or by-laws shall be deemed to be a reference to such statutes, regulations or by-laws, as amended, restated or replaced from time to time.

### **3. Severability**

3.1 Where a court of competent jurisdiction declares any section or part of a section of this By-law invalid, the remainder of this By-law shall continue in force unless the court makes an order to the contrary.

### **4. Backflow Prevention**

4.1 No person shall cause, permit, perform, allow or maintain a connection to the Water Distribution System in a manner which may under any circumstance allow Matter to enter such Water Distribution System, except in compliance with the provisions of this By-law.

4.2 Every Owner of a Property, shall ensure that a Backflow Prevention Device is installed in respect of Premise Isolation in every Building or Structure supplied by the County's Water Distribution System, and in accordance with the timetable set out in section 14.0.

4.3. Every Owner of a Property on which an Irrigation System is located, shall ensure that such Irrigation System is protected against Backflow in accordance with the CSA Standard.

4.4 Where there is a Fire Protection System within a Building or Structure, the Owner of the Property shall ensure that such Building or Structure is protected against Backflow in accordance with the CSA Standard.

4.5 Despite subsections 4.2, 4.3 and 4.4, the Owner of a Property to which this By-law applies is not required to comply with the provisions of those subsections where:

4.5.1 the Property has a Small Private Service;

4.5.2 the Owner has completed and submitted to the County a Self-Assessed Survey in accordance with this By-law; and

4.5.3 the degree of hazard on the Property is not a High or Severe Hazard

and the property is not one which requires Premise Isolation under the Building Code.

4.6 No person shall connect, cause to be connected, or allow to remain connected to the County's Water Distribution System any Alternate Water Supply.

4.7 No person shall cause, permit, install or allow an Alternate Water Supply servicing the same property as a Municipal Water Connection, unless there is a physical separation between the water supplies creating separate systems.

## **5. APPLICATION OF CSA STANDARD**

5.1 Except as otherwise set out in this By-law, the installation, maintenance and testing of Backflow Prevention Devices shall be in accordance with the CSA Standard.

5.2 In the event of a conflict between the provisions of this By-law and the CSA Standard, the provisions of this By-law shall prevail.

## **6. ADMINISTRATION, AND PENALTIES**

### **Administration and Enforcement**

6.1 The Water Purveyor is responsible for the administration of this By-law, including prescribing the content of any forms or other documents required under this By-law from time to time.

6.2 All Municipal By-Law Enforcement Officers are authorized to enforce this By-law.

6.3 The Water Purveyor is authorized to delegate the responsibility for the administration of this By-law to any employee or agent of the County's Water and Wastewater Operations Division of the Public Works Operations Department of the County.

6.4 This by-law shall be enforced by Officer's.

6.5 For the purpose of ensuring compliance with this by-law, an Officer may at all reasonable times, enter upon and inspect the Boulevard, any land or Property to determine whether or not the following are being complied with:

6.5.1 this by-law;

6.5.2 a direction or Order made under this by-law; or

6.5.3 a prohibition order made under Section 431 of the Municipal Act , 20015.

6.6 An Officer may for the purposes of the inspection under Section 6.5:

6.6.1 require information in writing or otherwise as required by the Officer from any Person concerning a matter related to the inspection; or

6.6.2 alone or in conjunction with a Person possessing special or expert knowledge, undertake an inspection to determine compliance with this by-law.

6.7 An Officer may make an Order, sent or served by prepaid regular mail to the last known address, posted on-site or delivered to a Person requiring the Person who contravened the by-law, within the time specified in the Order to:

6.7.1 discontinue the contravening activity; and/or

6.7.2 do work to correct the contravention.

6.8 If an Order under Section 6.7 is served by regular mail, the service shall be deemed to have been made on the fifth (5th) day after the day of mailing.

6.9 An Order may be served on a Person by handing it to the Person, but where the Order cannot be given or served by reason of the Person's absence from their Property or by reason of evasion of service, the Order may be given or served:

6.9.1 by handing it to another Person who appears to be over the age of 16 on the Property;

6.9.2 by posting it in a conspicuous place upon some part of the Property and by sending a copy by regular mail;

6.9.3 by sending it by prepaid registered mail to the Owner at the address where he/she resides; or

6.9.4 by sending it electronically to an email address that the Person to whom the Order is directed has provided for the purpose of receiving electronic documents or at which the Person is known to receive email communications.

6.10 An Order under Section 6.7 shall set out:

6.10.1 reasonable particulars of the contravention adequate to identify the contravention and the location where the contravention occurred;

6.10.2 the work to be completed which may include but is not limited to requiring that:

6.10.2.1 prior to performing any work, all necessary permits or other approvals be applied for and obtained;

6.10.2.2 a Cross Connection Survey Form be completed;

6.10.2.3 a Backflow Prevention Device be installed;

6.10.2.4 a Backflow Prevention Device be tested;

6.10.2.5 a Backflow Prevention Device be repaired;

6.10.2.6 a Backflow Prevention Device be replaced;

6.10.2.7 a legible Test Report be submitted to the County for approval;

6.10.2.8 a test tag be applied to a Backflow Prevention Device;

6.10.2.9 arrangements be made for the shutting off of the supply of water from the County's Water Distribution System until the work ordered to be done is completed; and

6.10.3 the date(s) by which the work must be complete.

6.11 Where the Owner fails to comply with an Order issued under this by-law within the time specified for compliance, an Officer with such assistance by others, as may be required, may bring the Property into compliance with any section of this by-law by:

6.11.1 undertaking the work to remove the contravention caused, permitted, directed, allowed or placed by the Owner of Property where the contravention occurred.

6.12 An Officer is authorized to give immediate effect to any order issued under Section 6.7 that has not been complied with by the Owner, under the provisions of the Haldimand County Procurement Policy.

6.13 Where any of the materials or things are removed in accordance with Section 6.11, the materials or things may be immediately disposed of by the Officer, and any recovered salvage value or other actual recovery of money made upon such disposal shall be credited first against costs.

6.14 An order to discontinue a contravening activity made under Section 6.7 or an order to do work made under Section 6.11 may be served personally or by registered mail to the last known address of the Owner or occupier of the Property where the contravention occurred.

6.15 Without limiting the generality of subsections 6.5 to 6.14, where the Water Purveyor has determined, in his or her sole discretion, that an immediate threat of contamination in the County's Water Distribution System exists that can endanger public health and safety, the Water Purveyor may shut off the water supply to the Property or any Building or Structure thereon, until the threat of contamination has been eliminated.

### **Penalties**

6.16 Every person who contravenes any provision of this By-law is, upon conviction, guilty of an offence and is liable:

6.16.1 on a first conviction, for each day or part of a day on which the offence occurs or continues, to a fine of not more than \$10,000; and

6.16.2 on any subsequent conviction, for each day or part of a day on which the offence occurs or continues, to a fine of not more than \$20,000.

6.17 Despite subsection 6.16, where the person convicted is a corporation,

6.17.1 the maximum fine in paragraph 6.16.1 is \$50,000; and

6.17.2 the maximum fine in paragraph 6.16.2 is \$100,000.

6.18 Any person who contravenes an order made under this By-law, or an officer or director of a corporation who knowingly concurs in such a contravention by the corporation, is guilty of a continuing offence and upon conviction is liable to a daily fine or penalty of a maximum of \$10,000 for each day or part of a day that the offence continues, and despite subsections 6.16 and 6.17, the total of all the daily fines imposed for an offence is not limited by the fine amounts listed in those subsections.

## **7. PROPERTY SURVEYS**

7.1 Subject to subsections 7.3 and 7.4, every Owner of a Property to which this By-law applies shall, within **six months** of the date that this By-law comes into force:

7.1.1. cause to be carried out a survey of the Owner's Property and of each of the Owner's Buildings and Structures on the Property with respect to all Cross Connections and all existing and required Backflow Prevention Devices;

7.1.2 ensure that such survey is carried out on a Cross Connection Survey Form by a person permitted to do so pursuant to the CSA Standard; and

7.1.3. ensure that the completed Cross Connection Survey Form and any applicable fee are received by the County within **14 days** of the survey being completed.

7.2 In addition to the obligations set out in subsection 7.1, each time that one or more of the following events occur, the Owner of a Property to which this By-law applies shall also comply with the requirements of paragraphs 7.1.1, 7.1.2 and 7.1.3 within **30 days** of the date on which such event occurred:

7.2.1 the hazard level of a Building or Structure on the Property has changed;

7.2.2. the ownership of the Property has changed;

7.2.3 the circumstances at the Property or the equipment has changed and such change either alters or has the potential to alter the information contained in the most recent Cross Connection Survey Form provided to the County.

7.3 Every Owner of a Property to which this By-law applies and which Property has a Small Private Service shall, within **six months** of the date that this By-law comes into force, and within every five years thereafter:

7.3.1. carry out a survey of the Owner's Property and of each of the Owner's Buildings and Structures on the Property with respect to all Cross Connections and potential hazards;

7.3.2 ensure that such survey is carried out on a Self-Assessed Survey by the Owner; and

7.3.3. ensure that the completed Self-Assessed Survey is received by the County within **14 days** of the survey being completed.

7.4 In addition to the obligations set out in subsection 7.3, each time that one or more of the following events occur, the Owner of a Property to which this By-law applies and which Property has a Small Private Service shall also comply with the requirements of paragraphs 7.3.1, 7.3.2 and 7.3.3 within **30 days** of the date on which such event occurred:

7.4.1 the hazard level of a Building or Structure on the Property has changed;

7.4.2. the ownership of the Property has changed;

7.4.3 the circumstances at the Property or the equipment has changed and such change either alters or has the potential to alter the information contained in the most recent Self-Assessed Survey provided to the County.

7.5 Every Owner of a Property to which this By-law applies and which the Property has a direct transmission water main connection, within **six months** of the date that this By-law comes into force, and annually thereafter:

7.5.1. carry out a survey of the Owner's Property and of each of the Owner's Buildings and Structures on the Property with respect to all Cross Connections and potential hazards;

7.5.2 ensure that such survey is carried out on a Self-Assessed Survey by the Owner; and

7.5.3. ensure that the completed Self-Assessed Survey is received by the County within **14 days** of the survey being completed.

7.6 In addition to the obligations set out in subsection 7.5, each time that one or more of the following events occur, the Owner of a Property to which this By-law applies and which Property has a direct transmission water main connection shall also comply with the requirements of paragraphs 7.6.1 and 7.6.2 within **30 days** of the date on which such event occurred:

7.6.1. the ownership of the Property has changed;

7.6.2 the circumstances at the Property or the equipment has changed and such change either alters or has the potential to alter the information contained in the most recent Self-Assessed Survey provided to the County.

7.7 No person shall submit a Cross Connection Survey Form or a Self-Assessed Survey to the County that contains inaccurate or false information.

## **8. SELECTION OF BACKFLOW PREVENTION DEVICES**

8.1. Every Owner of a Building or Structure located on a Property to which this By-law applies, shall ensure that every Backflow Prevention Device for Premise Isolation on his or her Property:

8.1.1 is selected in accordance with the CSA Standard;

8.1.2 is a testable device; and

8.1.3 is installed in accordance with the provisions of the Cross Connection Control Manual and the CSA Standard.

8.2 In the event of a conflict between the Cross Connection Control Manual and the CSA Standard, the provisions of the CSA Standard shall prevail.

8.3 Despite subsection 8.1, the Water Purveyor may require that a particular Backflow Prevention Device be used in respect of any Cross Connection.

## **9. INSTALLATION OF BACKFLOW**

9.1 Every person who installs, replaces, relocates or repairs a Backflow Prevention Device required under this By-law shall ensure that:

9.1.1 such device is installed in accordance with acceptable engineering practices, the requirements of the CSA Standard and the manufacturer's specifications;

9.1.2 such device is installed in a Building, Structure or underground vault and is protected from freezing;

9.1.3 where such device is installed in a Building or Structure, the device is installed in accordance with the conditions of a building permit required to be obtained from the County for such device in accordance with the Building Code, including the payment of all associated fees and charges;

9.1.4 where such device is installed in an underground vault, the device is installed in accordance with the conditions of a building permit required to be obtained from the County for such device in accordance with the Building Code, including the payment of all associated fees and charges;

9.1.5 such device is located in such a manner so that in the event of Backflow the device prevents contamination of the Water Distribution System;

9.1.6 where such device is installed for Premise Isolation, such device is located no more than 3.0 metres downstream of the Water Meter, or in the case of a Fire Protection System, such device is installed where the Fire Protection System enters the Building or Structure and in a location acceptable to the Water Purveyor; and

9.1.6.1 Despite subsection 9.1.6, an Owner may apply to the Water Purveyor to have such device installed where the water service enters the Building or Structure, and the Water Purveyor may approve the installation of the device in a location acceptable to the Water Purveyor, provided the following conditions are met:

a) A property inspection by the Water Purveyor, which includes a water shut off, confirms no Cross Connection between the property line and premise Backflow Prevention Device;

b) The Owner pays all fees and charges associated with the application, inspection and water shut off; and,

9.1.6.2 In the event of failure or refusal to comply with any of the conditions set out in subsection 9.1.6.1, the Owner shall comply with requirements set out in section 9.1.6

9.1.7 all piping between the Water Meter and such device is clearly labeled “no connection permitted” with labelling which is a minimum of 25mm in height, green in color and which is affixed to the piping no more than 300mm apart, at every bend and at every change of direction.

9.2 The Owner of a Building or Structure located on a Property to which this By-law applies shall protect each Backflow Prevention Device from freezing at all times.

9.3 The Owner shall, at all times, maintain a Backflow Prevention Device required under this By-law in proper working order and otherwise in accordance with this By-law.

## **10. TESTING OF DEVICES**

10.1 Every person who tests a Backflow Prevention Device required under this By-law shall carry out such testing in accordance with this By-law and the CSA Standard.

10.2 In addition to the testing methods set out in the CSA Standard, test procedures established by the ASSE or AWWA for testing Backflow Prevention Devices may be employed. However, in the event of a conflict between the testing methods set out in the CSA Standard and the testing procedures established by the ASSE or AWWA, the testing methods set out in the CSA Standard shall prevail.

10.3 Despite any provision in the CSA Standard to the contrary, every person who tests a Backflow Prevention Device required under this By-law shall enter the results of such test on a Test Report.

10.4 Every person who tests a Backflow Prevention Device required under this By-law shall, within **14 days** of completing such test, provide a legible Test Report to the County; and

10.4.2 upon completing such test, affix a completed test tag in the form approved by the Water Purveyor, to the device or immediately adjacent to the device on the piping connected thereto; and

10.4.3 upon finding that such device is malfunctioning or otherwise not in proper working order, immediately notify the Owner of the Property and the County of such condition.

10.5 Every Owner who has a Backflow Prevention Device required under this By-law which is located on his or her Property shall ensure that;

10.5.1 such device is tested accorded to CSA Standards when it is first installed and annually thereafter, or when requested by the County, and also each time when the device is replaced, relocated or repaired;

10.5.2 within **14 days** of completing a test of such device in accordance with paragraph 10.5.1, shall provide a legible Test Report to the County;

10.5.3 in the event that such device is malfunctioning or otherwise not in proper working order, the device is immediately repaired or replaced.

10.6 No person shall submit a Test Report to the County that contains inaccurate or false information.

## **11. REMOVAL OF BACKFLOW PREVENTION DEVICES**

11.1 No person shall remove a Backflow Prevention Device required under this By-law, or any part thereof, after it has been installed, and no Owner of a Property where such a Backflow Prevention Device is installed shall cause or permit the removal of such a device, unless such removal is:

11.1.1 to facilitate the repair of the device, with the device replaced immediately after the repair is carried out;

11.1.2 to replace the device with another one that meets or exceeds the provisions of this By-law; or

11.1.3 to facilitate the disconnection of the Private Water Connection from the Water Distribution System in accordance with the written approval of the Water Purveyor,

or any combination of the foregoing.

11.2 Whenever a Backflow Prevention Device required under this By-law has been permanently removed or the type of device has been changed, the Owner

of the Property must notify the Water Purveyor in writing immediately of such change.

## 12. AUTHORITY OF THE WATER PURVEYOR

12.1 The Water Purveyor has the authority to:

12.1.1 require an Owner of a Property to which this By-law applies to conduct additional tests, provide additional reports and undertake any other measures required for the prevention of Backflow or protection of a Cross Connection; and

12.1.2 permit exceptions to provisions of this By-law where the Water Purveyor is satisfied that such an exception does not create an unreasonable risk of Backflow.

## 13. SHORT TITLE

13.1 This By-law may be referred to as the "Backflow Prevention By-law".

## 14. EFFECTIVE DATE

14.1 This By-law shall come into force on the date it is passed.

14.2 Despite subsection 14.1, the Owner of a Building or Structure located on a Property to which this By-law applies and which existed prior to the date referred to in subsection 14.1 shall comply with the provisions of subsections 4.2, 4.3 and 4.4 prior to the date set out below in accordance with the corresponding degree of hazard on the Property:

### ***Degree of Hazard for Compliance Date***

#### ***Building or Structure Located on Property***

High or Severe Hazard **18 months** after the date this By-law comes into force

All other hazards **24 months** after the date this By-law comes into force, except for a Property which has a Small Private Service, in which case compliance with subsections 4.2, 4.3 and 4.4 is not required.

ENACTED this \_\_\_\_ day of Month, Year.

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CLERK

DRAFT