

# Backflow Device Inspections & Cross Connections Policy

## Town of Williston

### Williston Selectboard

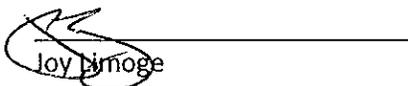
The foregoing Policy is hereby adopted by the Selectboard of the Town of Williston of Williston, Vermont, this 18th day of October, 2016 and is effective as of this date until amended or repealed.

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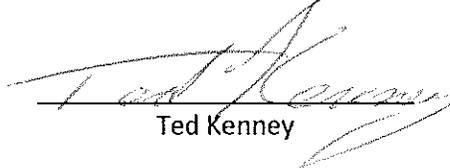
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**Abstract:** This policy will aid in defining the requirements for a backflow prevention/cross connection control program. It must be remembered that the installation of a backflow prevention device does not eliminate a cross connection. The installation of a backflow prevention device is a protection solution when other plumbing options are not feasible.

## 1. PURPOSE

The Town of Williston Water Department, recognizes the need and responsibility to protect the public water system served by the Water Department from the possibility of contamination or pollution by isolating and preventing backflow or back siphoning contaminates or pollutants, including liquids, gases, or other substances from a customer's internal distribution system into the water distribution system.

The authority for this Policy is in the Williston Water Use Ordinance which requires that all meters be installed with cellar stops and a check valve or a valve on each side of the meter.

## 2. DEFINITIONS

### 2.1. Backflow Prevention Assembly – Type

Shall mean any effective assembly used to prevent backflow into a potable water system. The type of assembly shall be based on the existing or potential degree of hazard, and backflow condition. The types of backflow prevention assemblies are:

- a. Air Gap (AG)
- b. Atmospheric Vacuum Breaker Backsiphonage Prevention Assembly (AVB)
- c. Double Check Valve Backflow Prevention Assembly (DCV)
- d. Double Check- Detector Backflow Prevention Assembly (DCVD)
- e. Dual Check (DC)
- f. Pressure Vacuum Breaker Backsiphonage Prevention Assembly (PVB)
- g. Reduced Pressure Principal Backflow Prevention Assembly (RPZ)
- h. Reduced Pressure Principal-Detector Backflow Prevention Assembly (RPZD)
- i. Backflow Preventer with Intermediate Atmospheric Vent (BPIAV)
- j. Spill-Resistant Pressure Vacuum Breaker Backsiphonage Prevention Assembly (SVB)

### 2.2. Backflow Prevention Assembly Tester – Certified

Shall mean a person who has proven his/her ability to the satisfaction of the Department. Each person who is certified to make field tests and reports on backflow prevention assemblies shall be conversant with applicable laws, rules and regulations and have had experience in plumbing or pipe fitting or have other equivalent qualifications in the opinion of the Department.

### 2.3. Consumer

Shall mean the owner or operator of an on-site water system(s) having a service from a public potable water system.

#### **2.4. Cross Connection**

Shall mean any unprotected actual or potential connection or structural arrangement between a public or a consumer's potable water system and any other source or system through which it is possible to introduce into any other part of the potable system any used water, industrial fluid, gas, or substance other than the intended potable water with which the system is supplied. Bypass arrangements, jumper connections, removable sections, swivel or change-over devices and other temporary or permanent devices through which or because of which backflow can occur are considered to be cross-connections.

#### **2.5. Department**

Shall mean the Williston Water Department under the Williston Public Works Department

#### **2.6. Director**

Shall mean the Director of Public Works

#### **2.7. Dual Check**

Shall mean the residential, non-testable device installed at residential homes for containment protection. It shall be installed in-line and downstream of the water meter and contains no shut off valves.

#### **2.8. Inspection**

Shall mean the physical examination or testing of an installed backflow prevention device by a certified inspector to verify that the backflow prevention device is functioning properly.

#### **2.9. Shall**

Shall is mandatory; May - is permissive.

### **3. POLICY**

#### **3.1. When a backflow is found**

When a backflow condition becomes known, Williston Water Department shall deny or immediately discontinue service to the premise until the consumer has corrected the condition(s). The Department has the authority by ordinance to terminate any water service connection to any facility where cross connections are found to be in non-compliance. If necessary, water service shall be disconnected for failure to test or maintain backflow prevention devices in a manner acceptable to the Department. If it is found that the backflow prevention device has been removed or bypassed or otherwise rendered ineffective, water service shall be discontinued unless corrections are made immediately.

- a. In the case of premises having (1) internal cross-connections that cannot be permanently corrected or protected against, or (2) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible

for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist, the public water system shall be protected against backflow from the premises by installing a backflow prevention assembly(s) in the service line.

- b. Installation of the residential dual check device on a retrofit basis on existing service lines will be instituted at a time deemed necessary by the Department.

### **3.2. Approval of backflow prevention assembly**

Any backflow prevention assembly required herein shall be a make, model and size approved by the Director. The term "Approved Backflow Prevention Assembly" shall mean an assembly that has been manufactured in full conformance with the standards established by the American Water Works Association entitled:

- AWWA/ANSI C510-92<sup>1</sup> Standard for Double Check Valve Backflow Prevention Assemblies;
- AWWA/ANSI C511-92<sup>1</sup> Standard for Reduced Pressure Principle Backflow Prevention Assemblies.

### **3.3. Final Approval**

Final approval shall be evidenced by a "Certificate of Compliance" for the AWWA standards.

### **3.4. Backflow Preventers**

Backflow preventers, which may be subject to backpressure or back-siphonage, that have been fully tested and have been granted a Certificate of Approval by said qualified laboratory and are listed on the laboratory's current list of approved backflow prevention assemblies may be used without further test or qualification.

### **3.5. Domestic backflow prevention devices**

All domestic backflow prevention devices, with the exception of residential dual check valves, shall be installed and repaired in accordance with local, state, and federal regulations, which may require persons performing repairs to hold a professional license and certification, except for backflow prevention devices installed on fire protection systems. A licensed fire sprinkler contractor is responsible for all work conducted on a fire protection system, including the installation, maintenance and repair of backflow prevention devices.

### **3.6. Field Testing**

- a. It shall be the duty of the consumer at any premise where reduced pressure backflow prevention assemblies are installed to have a field test performed by a certified backflow prevention assembly tester upon installation and at least once per year.
- b. It shall be the duty of the consumer at any premise where pressure vacuum breakers are installed to have a field test performed by a certified backflow prevention assembly tester upon installation and at least once per year. In those

instances where the Director deems the hazard to be great enough he may require field tests at more frequent intervals. These tests shall be at the expense of the water user and shall be performed by a certified tester approved by the WWD.

- c. It shall be the duty of the Director to see that these tests are made in a timely manner. The consumer shall notify the WWD in advance when the tests are to be undertaken so that an official representative may witness the field tests if so desired. These assemblies shall be repaired, overhauled or replaced, and retested at the expense of the consumer whenever said assemblies are found to be defective. Records of such tests, repairs and overhaul shall be made available to the WWD within fourteen (14) days of completion of the test.

### **3.7. Previously installed backflow prevention assemblies**

- a. All presently installed backflow prevention assemblies which do not meet the requirements of this section but were devices for the purposes described herein at the time of installation and which have been properly maintained, shall, except for the testing and maintenance requirements stated within these rules be excluded from the requirements of these rules so long as the Director is assured that they will satisfactorily protect the water's purveyor's system.
- b. Whenever the existing device is moved from the present location or requires more than the minimum maintenance or when the Director finds that the maintenance constitutes a hazard to health, the unit shall be replaced with an approved backflow prevention assembly meeting the requirements of this section.

## **4. BACKFLOW DEVICE INSPECTOR DUTIES**

### **4.1. Certified backflow device inspectors duties**

Certified backflow device inspectors shall have the following duties relative to this cross-connection control program:

- a. Only NEWWA, ABPA, ASSE, or Department approved equal certified backflow prevention device inspectors shall be permitted to inspect and test backflow prevention devices.
- b. All certified backflow device inspectors shall supply the Department with a copy of his/her backflow device inspector's certification each January, and notify the Department if that certification is ever revoked, suspended, or not renewed.
- c. The backflow device inspector shall make competent inspections and reports of the tested backflow prevention device on forms approved by the Department.
- d. Competently use all of the equipment necessary to properly test and inspect all backflow prevention devices. Have a backflow device preventer test kit that is maintained in proper working order and calibrated annually.
- e. Perform the work and be responsible for the competency and the accuracy of all tests and reports.

- f. Submit a copy of the backflow prevention device test report to the Department within fourteen (14) calendar days of completion of the test on each device. Test reports shall be mailed to:

Williston Water Department  
7900 Williston Road  
Williston VT 05495  
Attention: Director

- g. Maintain records of all test results for a minimum of two years and make records available during that time to the Department at the Departments request.