

Westerville Water Department Cross Connection Control Policy

PURPOSE

Cross connection control is intended to prevent the contamination of the public water supply by controlling the flow of water, other liquids or substances into the public water system from any source other than the potable water supply. This policy addresses the control of actual or potential cross connections from the consumer's plumbing to the public water system. Backflow prevention control devices provide protection to the public water system by preventing the backflow of contaminants from the consumer's system to the public system.

AUTHORITY

This policy shall apply to all premises served by the public water system of the City of Westerville. Authority for this policy is granted in the Ohio Administrative Code 3745-95, the Ohio Plumbing Code Chapter 608 and the City of Westerville Codified Ordinances Chapter 931.11. Definitions of language used in this policy are provided in OAC 3745-95.

1. CROSS CONNECTION PROHIBITED

- A. No water service connection shall be installed or maintained to any premises where actual or potential cross connections to the public potable or consumer's water system may exist unless such actual or potential cross connections are abated or controlled to the satisfaction of the City Manager or designee.
- B. No water service connection shall be installed or maintained whereby water from an auxiliary water system may enter the public potable or consumer's water system unless such auxiliary water system and the method of connection and use of such system shall have been approved by the City Manager or designee.

2. WATER USE SURVEYS AND INSPECTIONS

- A. The owner/consumer's premises shall be accessible at all reasonable times to the City of Westerville Water Department or authorized representative for the purpose of making surveys and investigations of water use practices within the property.
- B. On request by the Water Utility Manager or authorized representative the consumer shall furnish information regarding the piping system or water use within the consumer's property.

3. WHERE PROTECTION IS REQUIRED

- A. An approved backflow prevention device shall be installed on each service connection to a consumer's water system serving premises where in the judgment of the City Manager or designee a polluttional, system, health or serve health hazard to the public water system exists.
- B. When determining where protection is required the City Manager or designee will evaluate the premises for the following:

Access to an auxiliary water source, if any substances are handled in such a fashion to create an actual or potential hazard to the public water system, if there are internal cross connections that are not correctable or complex plumbing that make it impractical to determine whether or not a cross connections exist, security or other restrictions that make it impractical to perform a complete cross connection survey, if there is a repeated history of cross connections being established, and the existence of fire suppression or irrigation systems.

- C. An approved backflow device shall be installed on each service connection to a consumer's water system that serves the following type of facilities:

Hospitals, mortuaries, clinics, nursing homes, laboratories, water front facilities, sewage treatment, sewage or storm water pumping facilities, car washes, and all industries (including chemical, metal plating, food and beverage plants).

4. TYPE OF PROTECTION REQUIRED

- A. The required type of protection for each service connection shall depend on the degree of hazard as established by the City Manager or designee. The following list serves only as a guideline.

<u>Type of property</u>	<u>Protection</u>
Industrial (as determined by the City Manager)	Reduced Pressure Principle
Commercial Uses listed in 3(C) of this policy and full serve restaurants	Reduced Pressure Principle
Facilities where one service supplies, or have the ability to supply, more than one tenant (such as retail shopping centers, strip malls, business suites and office buildings) and buildings not 100% occupied by the owner	Reduced Pressure Principle

Other facilities shall match the highest level of on-site hazard. However, if the on site hazards are limited to two or less and they can be permanently isolated by an approved backflow device then the individual hazard(s) may be isolated in lieu of a containment device at the service connection entry.

To be determined by
City Manager

Fire Suppression Systems

Wet with no chemicals

Double Check Detector

Wet with, or ability to add, approved chemicals

Reduced Pressure Principle
Detector

Existing systems with a non-health hazard need not install a backflow preventer until the system is modified or upgraded, if a UL listed check valve is properly maintained.

Residential

Underground irrigation system (where no potential for backpressure exists)

Pressure Vacuum Breaker

Direct plumbing to pool

Reduced Pressure Principle

- B. Properties with access to an auxiliary water supply shall install a Reduced Pressure backflow assembly (unless abated or controlled as directed by the City Manager or designee).

5. BACKFLOW PREVENTION DEVICES

- A. All backflow prevention assemblies required after the date of this policy shall be endorsed by the American Society of Sanitary Engineering (ASSE) or approved equal.

- B. The required backflow protection shall be met as follows:

Air gap separations shall meet American National Standards Institute standard A112.1.2

Reduced pressure principle backflow prevention assembly --ASSE 1013 or an air gap

Reduced pressure principle-detector assembly – ASSE 1047 or an air gap

Double check valve assembly – ASSE 1015, or ASSE 1013 or an air gap

Double check-detector check valve assembly – ASSE 1048, or ASSE 1047 or an air gap

Pressure vacuum breaker backflow prevention assembly – ASSE 1020, or ASSE 1015, ASSE 1013 or an air gap

6. INSTALLATION

- A. The installation and expense of the required backflow prevention devices shall be the responsibility of the water customer.
- B. Backflow prevention assemblies (Reduced Pressure and Double Check) are to be installed immediately after the meter, except where a meter bypass, limited area fire system or strainer are needed.
- C. All assemblies are to be installed in the horizontal orientation, include properly located test cocks and manufacturer approved tightly closing shut-off valves and not subject to excessive heat or freezing.
- D. Devices must be a minimum of 12 inches from any wall or obstruction and the test cocks need a minimum clearance of 24 inches in front of them. Clearance above the floor should be at least 12 inches and not more than 36 inches.
- E. A floor drain should be installed as close as possible to the assembly.
- F. Reduced Pressure assemblies shall not be installed in any area subject to flooding and have an air gap assembly on the relief valve drain.
- G. Pressure Vacuum Breakers shall not be subject to back pressure and must be installed a minimum of 12 inches above the highest downstream discharge. Lawn irrigation systems shall not have any outside exposed tees, drains or hose bibs.
- H. Containment backflow devices on the customer's service line prevent the release of on-site pressure to the public water system and therefore a thermal expansion tank or other internal compensation in accordance with the Ohio Plumbing Code Section 608 shall be installed.
- I. If water flow can not be interrupted for backflow assembly testing a bypass line with equal protection should be installed. No backflow prevention assembly shall be plumbed with a bypassed unless the bypass line contains equal backflow protection.

- J. Any exceptions to these installation requirements need the approval of the City Manager or designee.

7. TESTING AND MAINTENANCE

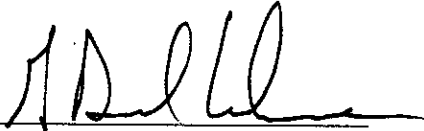
- A. The owner/consumer shall be responsible for the inspection, testing, maintenance and repair requirements of any required backflow prevention device. The City Manager or designee has the duty to ensure the above mentioned is complied with.
- B. Backflow prevention assemblies shall be inspected and tested at the time of installation and at least every 12 months and rebuilt/repared as needed.
- C. Testing shall be performed by an Ohio Department of Commerce certified backflow tester (www.com.state.oh.us/dic/plans/scripts/bkfloqy.htm). Test results shall be provided to the consumer on a City of Westerville "Backflow Prevention Assembly Test Report" or similar form. A copy must be forwarded to the Division of Water to document compliance with this policy.
- D. The owner/consumer shall be responsible for retaining a maintenance and test log/record that is readily available to the City. Each device shall have a tag attached documenting the most recent test.
- E. Whenever backflow prevention assemblies required by this policy are found to be defective they shall be repaired or replaced by the owner/consumer at their expense without delay.
- F. Backflow prevention assemblies shall not be removed or otherwise made ineffective without specific authorization of the City Manager or designee.

8. BOOSTER PUMPS

- A. Booster pumps shall not be permitted on premises serving a one, two or three family dwellings, unless an air gap is provided.
- B. Booster pumps on premises, not included in paragraph A, shall be equipped with a low pressure cut-off designed to shut off the pump when pressure in the service line on the suction side of the pump drops to ten pounds per square inch or less.
- C. It shall be the responsibility of the owner/consumer to maintain the low pressure cut-off device in proper working order and to certify to the Division of Water at least every twelve months that the device is operable and maintained in continuous operation.

9. VIOLATIONS

- A. The City Manager or designee shall deny or discontinue, after proper notice to the occupants thereof, the water service to any premise wherein any required backflow prevention assembly is not installed, maintained in working order, properly or timely tested, removed or bypassed.
- B. The City Manager or designee shall immediately discontinue water service to any premise wherein a backflow condition exists or is suspected to exist.
- C. Water service to the above premises shall not be restored until the consumer has corrected or eliminate such conditions or defects in conformance with this policy.
- D. Water service that has been terminated for not conforming to this policy shall be assessed a turn-on charge based on labor costs plus twenty percent.



G. David Lindimore
City Manager

June 11, 2007
Date