

Washington Township Water Authority
Addition to Rules and Regulations Section V

10. Cross-connection control and backflow prevention devices.

- A. No water service connection shall be installed or maintained to any premises where actual or potential cross-connections to the public water supply system or consumer's water system may exist, unless such cross-connections are eliminated or controlled to the satisfaction of the Authority. A cross-connection is defined as any pipe, valve, hose or other arrangement or device connecting the pipelines or facilities of the Authority, to and with other pipes or fixtures by which any contamination might be admitted or drawn into the distribution system of the Authority from lines other than the Authority's.
- B. A cross-connection may be considered to be eliminated if a method of backflow prevention is installed and maintained in accordance with these Rules and Regulations or as otherwise approved in writing by the Authority.
- C. For all new service connections, backflow prevention devices are required to be installed and maintained by the customer in accordance with these Rules and Regulations.
- D. For existing service connections, backflow prevention devices are required to be installed and maintained by the customer in accordance with these Rules and Regulations when directed by the Authority for the following cases:
 - 1. Customers having an auxiliary water supply other than that served by the Authority.
 - 2. Customers handling any substance in such a fashion as to create an actual or potential hazard to the public water supply system.
 - 3. Customers having internal cross-connections that are not correctable, or intricate plumbing arrangements which make it impractical to determine whether or not cross-connections exist.
 - 4. Customers where, because of security requirements or restrictions, it is impossible or impractical to make a complete cross-connection survey.
 - 5. Whenever the Authority is otherwise concerned that contaminants or pollutants could backflow through the service connection into the public water supply system.
- E. The customer's premises being served shall be made available at all reasonable times to Authority representatives for the purposes of surveying for, or investigating, actual or potential cross-connections. On request of the Authority, the customer shall furnish information on water use practices within the premises.
- F. When required, the approved backflow prevention device shall be installed on the customer's side of the water meter, as close to the meter as is reasonably practical, and prior to the first branch line leading off from the service line. Installation shall be by properly qualified persons, in accordance with the device manufacturer's instructions, at the cost of the customer. If necessary to install the backflow prevention device in a pit or vault, the pit or vault shall be water-tight, free from flooding, and maintained free from standing water by means of either a sump and pump or a suitable drain which does not permit backflow from a sanitary or storm sewer. All installations shall provide adequate access and lighting to permit maintenance, inspection, and testing of the backflow prevention device.
- G. The type of backflow prevention device shall depend on the degree of hazard which exists as follows, or in accordance with the guidelines of the Pennsylvania Department of Environmental Protection Public Water Supply Manual Part VII.
 - 1. An approved air gap separation shall be installed where the public water supply system may be contaminated with substances that are dangerous to public health and could cause a severe health hazard, and where such a device would be technically feasible and/or practical.
 - 2. An approved air gap separation or an approved reduced pressure zone device shall be installed where the public water supply system may be contaminated with a substance that could cause a system or health hazard.
 - 3. An approved air gap separation, an approved reduced pressure zone device, or an approved double check valve assembly shall be installed where the public water supply system may be polluted with substances that would be objectionable but not dangerous to health.

- H. Any backflow prevention device required by these rules and regulations shall be of a model or construction approved by the public water supplier and shall comply with the following:
1. Air gap separation to be approved shall be at least twice the diameter of the supply pipe, measured vertically above the top rim of the receiving vessel, but in no case less than one inch.
 2. A double check valve assembly or a reduced pressure zone device shall be in full conformance with American Water Works Association standard ANSI/AWWA C510 (Standard for Double Check Valve Backflow-Prevention Assembly) or ANSI/AWWA C511 (Standard for Reduced-Pressure Principle Backflow-Prevention Assembly). The customer shall provide evidence of the proposed device conforming with these standards.
- I. All non-residential customers having backflow prevention devices as required by these rules and regulations shall have inspections, tests, and overhaul made in accordance with the following schedule, or more often where inspections indicate a need.
1. Air separation shall be inspected at the time of installation, and at least every 12 months thereafter.
 2. Double check valve assemblies shall be inspected and tested for tightness at the time of installation, and at least every 12 months thereafter. These devices shall be dismantled, inspected internally, cleaned, and repaired whenever needed, and at least every 30 months.
 3. Reduced pressure zone devices shall be inspected and tested for tightness at the time of installation, and at least every 12 months thereafter. These devices shall be dismantled, inspected internally, cleaned, and repaired whenever needed and at least every five years.
- J. All such inspections, tests, and maintenance of backflow prevention devices shall be at the customer's expense, and shall be performed by a person qualified to inspect, test, and overhaul backflow prevention devices. If the Authority determines such person(s) to be unqualified, the customer shall provide a qualified replacement. The customer shall maintain a complete record of each backflow prevention device from purchase to retirement. This shall include a comprehensive listing that includes a record of all tests, inspections, and repairs, and the person performing such tests, inspections, and repairs. Records shall be submitted to the Authority upon request.
- K. Whenever backflow prevention devices required by these rules and regulations are found to be defective, they shall be repaired or replaced at the expense of the customer without delay.
- L. Backflow prevention devices shall not be bypassed, made inoperative, removed, or otherwise made ineffective without specific authorization by the Authority.
- M. Where a booster pump has been installed on the service line to, or within, any premises, such a pump shall be equipped with a low pressure cut-off device designed to shutoff the booster pump when the pressure in the service line on the suction side of the pump drops to 10 pounds per square inch gauge or less for a period of 30 seconds or longer. It shall be the duty of the water consumer to maintain the low pressure cut-off device in proper working order and to certify to the Authority, upon request, that the device is operating properly.
- N. The Authority may deny or discontinue, after issuing reasonable notice, the water service to any premises wherein any backflow prevention device required by these rules and regulations is not installed, tested, and maintained in a manner acceptable to the public water supplier, or if it is found that the backflow prevention device has been removed or by-passed, or if an unprotected cross-connection exists on the premises, or if a low pressure cut-off device required by these rules and regulations is not installed and maintained in working order. Water service to such premises shall not be restored until the consumer has corrected or eliminated such conditions or defects in conformance with these rules and regulations and to the satisfaction of the Authority.