

MARBLEHEAD WATER AND SEWER COMMISSION

Cross-Connection Control

The purpose of a Cross-Connection Control Program is to protect the public potable water supply; to promote the elimination or control of existing cross-connections between potable water systems and non-potable systems; and to provide for the maintenance of a continuing program of cross-connection control which will effectively prevent the possible contamination or pollution of all potable water systems by cross-connection.

The Marblehead Water and Sewer Commission is responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or back-siphoning of contaminants or pollutants. If, as a result of a survey of the premises, the Commission determines that an approved backflow prevention device is required at the town's water service connection or as in-plant protection on any customer's premises, the Commission, or its designated agent, shall issue a cross-connection violation form to said customer to install approved backflow prevention devices. The customer shall, within a time frame determined by the Commission, install such approved device or devices at his or her own expense, and failure or refusal or inability on the part of the customer to install said device or devices within the specified time frame shall constitute grounds for discontinuing water service to the premises until such device or devices have been properly installed to the Commission's satisfaction.

This authority is provided for in the Federal Safe Drinking Water Act of 1974, (Public Law 93-523); the Commonwealth of Massachusetts Drinking Water Regulations, 310 CMR 22.22; the Acts of 1916, chapter 309, section 15; the Acts of 1979, chapter 443, section 2; and Town of Marblehead By-Laws section 268-1 and section 268-3.

When is the Installation of a Backflow Device Required?

A backflow preventer is required for:

- Permanently-installed irrigation systems. (This includes residential in-ground sprinkler systems);
- Industrial, commercial or institutional premises having a private well or other private water source with a cross-connected to the public water system. (Permission for such cross-connections may be denied by the Commission);
- Property that contains a private well or individual water source that does not serve a residential dwelling. (A private well or individual water source serving residential dwellings used for potable or non-potable purposes will not be allowed a physical connection with the public water supply system.)

Responsibilities of the Property Owner

The cross-connection control program requires that:

- The owner shall be responsible for the elimination or protection of all cross-connections on his or her property;
- The owner shall be responsible for applying for and obtaining all necessary approvals and permits for the maintenance of cross-connections and installation of backflow prevention devices;
- The owner shall correct any malfunction of the backflow preventer that is revealed by periodic testing;
- The owner shall inform the Commission of any proposed or modified cross-connections and also any existing cross-connections of which the owner is aware but has not been identified by the Commission;
- The owner shall not install a bypass around any back-flow preventer unless there is a backflow preventer of the same type on the bypass. Owners who cannot shut down operations for testing of the device(s) must supply additional devices necessary to allow testing to take place;
- The owner shall install backflow preventers in a manner approved by the Commission;
- The owner shall install only backflow preventers approved by the MassDEP;
- The owner of industrial, commercial or institutional premises having a private well or other private water source must have a permit if the well or source is cross-connected to the Commission's system. Permission to cross-connect may be denied by the Commission. The owner may be required to install a backflow preventer at the service entrance if a private water source is maintained even if it is not cross-connected to the Commission's system;
- The owner of a private well or individual water source serving residential dwellings used for potable or nonpotable purposes will not be allowed a physical connection with the public water supply system;
- The Commission may require the owner of a property that contains a private well or individual water source that does not serve a residential dwelling to install a backflow preventer if in their opinion the potential for cross-connection exists;
- The owner of a permanently installed irrigation system shall install, at minimum, a testable pressure vacuum breaker. Failure to maintain a device in proper working order or failure to provide proof of testing will result in termination of service;
- The owner shall be responsible for the payment of all fees for permits, annual or semi-annual device testing, retesting in the case that the device fails to operate correctly, and second re-inspections for non-compliance with MassDEP or Commission requirements.

At times the Commission through its authorized representative may request the installation of non-testable devices to protect the water supply from low potential hazards within the system. Failure of the owner to comply may result in the mandatory installation of a testable device.

Backflow Device Testing Requirements

"The public water system [Marblehead Water and Sewer Commission] is responsible to ensure that each reduced pressure backflow preventer will be inspected semi-annually in accordance with the public water system's approved cross-connection program plan, as provided for in 310 CMR 22.22(3)(b). If the supply is used less than six months of the year, these devices shall be inspected and tested once each year. Each double check valve assembly shall be tested annually. Pressure-type vacuum breakers should be tested at least annually by the owner of the device. Each test shall be conducted by a Certified Backflow Prevention Device Tester." (MassDEP Cross-Connection Control Program Regulations – 310 CMR 22.22(13)(d).)