



## MARBLEHEAD WATER AND SEWER COMMISSION

### Cross-Connection Backflow Devices

Below are examples of typical backflow preventers that are required to be installed on ***all*** irrigation systems.

#### PRESSURE VACUUM BREAKER



A Pressure Vacuum Breaker (PVB) device is an atmospheric vacuum breaker that can be utilized under constant pressure and that can be tested in line. These units are available in several configurations and sizes and have broad use for residential irrigation systems. Installation of these devices must be at least 6 to 12 inches higher than the existing outlet.

A PVB device does not have to be registered with the Water and Sewer Commission. MassDEP Cross-Connection Control Program Regulations 310 CMR 22.22(13)(d) reads that, "Pressure-type vacuum breakers should be tested at least annually by the owner of the device."

(The illustration shows one of several PVB devices that are available at hardware or home improvement stores.)

#### REDUCED PRESSURE ZONE BACKFLOW PREVENTER

A Reduced Pressure Zone (RPZ) Backflow Preventer device provides maximum protection against back-siphonage. They can be used under constant pressure and are required for high hazard installations.

A RPZ Backflow Preventer must be registered with the Water and Sewer Commission. Complete and return the Backflow Device Registration Data Sheet available on the water department web page or at the Water and Sewer Commission office.

RPZ Backflow Preventers must be tested semi-annually (or at least annually for water systems that are used for less than six (6) months of the year). Each test shall be conducted by a Certified Backflow Prevention Device Tester. (310 CMR 22.22(13)(d)).

The certified test results are to be completed by June (semi-annual) and December (annual) of each year and be submitted to the Water and Sewer Commission within 48-hours of the test.

(The illustration shows one of several RPZ Backflow Preventers that are available at hardware or home improvement stores.)

