

## SPRINKLING SYSTEM INFORMATION SHEET

**Landscape sprinkling systems must be equipped with some type of approved backflow protection (Uniform Plumbing Code-Chapter 10).**

Several types of backflow prevention devices or assemblies are available for use on landscape sprinkling systems. Below is a brief description of the types available:

### ATMOSPHERIC VACUUM BREAKER

This is the most commonly used anti-siphon device. It consists of an atmospheric vent with an air poppit. The water source closes the air poppit allowing water to the downstream equipment. If water supply is lost or a negative pressure situation develops, this device allows air into the system to break the vacuum. Atmospheric Vacuum Breakers (AVB) must be installed at least 6 inches above the highest discharge point on the system. An AVB cannot be installed below ground or in a pit. Shut off or control valves cannot be installed down stream of an AVB. A separate AVB would be required for each individual station of a sprinkling system. **AVB's do not require testing and do not have to be reported to your local water supply agency.**

### PRESSURE ATMOSPHERIC VACUUM BREAKERS

This assembly has a spring loaded air poppit with an atmospheric vent and an independently acting spring loaded check valve. The assembly allows air into the system breaking the vacuum if the water supply is lost or a negative pressure situation develops. The check valve adds secondary protection. Pressure Atmospheric Vacuum Breakers (PVB) must be installed at least 12 inches above the highest discharge point on the system. A PVB cannot be installed below ground or in a pit. Shut off valves are allowed on the discharge side of this assembly. One PVB could protect several stations on a sprinkling system.

**NOTE:** Many suppliers offer a dual check valve device. This device consists of two spring loaded check valves but no shutoff valves or test cocks. This device is not approved for use in protecting against backflow from lawn sprinkling systems. It should not be used for this purpose!

### REDUCED PRESSURE PRINCIPLE ASSEMBLY

A Reduced Pressure Principle assembly consists of two independently operating spring loaded check valves, a relief port venting to atmosphere, up and downstream isolation valves, and four

appropriately placed test cocks. A Reduced Pressure Principle assembly (RP) must be used on any sprinkling system utilizing chemical injection. Dual source (using both public drinking water system and irrigation or auxiliary water supplies) sprinkling systems must use a RP assembly and follow additional requirements established to prevent the systems from being physically connected together. RP's must be installed a minimum of 12 inches above ground.

**PLEASE NOTE!** All PVB, DCA and RP backflow prevention assemblies must be tested within ten days of initial use and annually thereafter by a commercially available certified backflow technician. Maeser Water Improvement District must be notified of the installation and/or location of all testable backflow prevention assemblies (PVB, DCA, and RP) within their water service area! Maeser Water Improvement District is required to by law to maintain an inventory record of all testable backflow prevention assemblies. They are also required to maintain copies of test results and repairs of all assemblies on inventory. (Most commercially available backflow technicians charge between \$25.00 and \$55.00 to test a backflow prevention assembly. The cost of installation, maintenance and testing of an assembly is the responsibility of the owner).

#### DUAL SOURCE SPRINKLING SYSTEM

A sprinkling system utilizing non-potable pressurized irrigation and the public drinking water system may have a "swing connection" installed so the **EITHER** the pressurized irrigation **OR** the drinking water system is feeding the sprinkling system (**only one supply can be connected at any one time**), **AND** a Reduced Pressure Zone Principal backflow assembly (RP) must be installed on the drinking water system from any residual contamination from the irrigation water or the sprinkling water system from entering the drinking water system. Reduced Pressure Zone Principal backflow assemblies must be tested by a certified backflow technician within ten (10) days of initial use and annually thereafter. Test reports must be forwarded to your local water purveyor. Be sure to check with your local water purveyor to see if they allow dual source connections!

**DOUBLE CHECK VALVES: Not allowed for Utah lawn irrigation system installations per current code!**