The Arizona Department of Environmental Quality (ADEQ) and Tucson City Code require the installation of a Reduced Pressure Assembly (RPA) for protection of the public water supply if there is an alternate water source on a property. The ADEQ defines rainwater, gray water, well water, and reclaimed water as alternate water sources. In the event of a cross connection on your property, an RPA will prevent an alternate water source from entering the public water supply and stop potential contamination.
Did You Know?

The Reduced Pressure Assembly (RPA) is the only approved backflow preventer that protects against both back-siphonage and backpressure.

Commercial & Multi-Family Irrigation Systems

Whether or not an irrigation system exists, all commercial sites are required by ADEQ and the Tucson Code to have an RPA installed on each potable service connection (service protection). The RPA protects the public water system from potential contamination originating in the irrigation system or other sources of contamination.

NOTE: When an RPA is installed on the potable water service, additional plumbing adjustments may be required to prevent thermal expansion damage to internal plumbing.

Single-Family Irrigation Systems

A backflow assembly is required to be installed on the potable service connection when:

- The site has a potable irrigation meter in addition to the potable water meter.
- The irrigation system is designed for chemigation or the injection of chemical pesticides and fertilizers through the irrigation system.
- The site has a rainwater or gray water system that includes any kind of pump or pressurization for irrigation systems.
- The site has Tucson Water reclaimed water service and a Tucson Water drinking water service or a private well that is providing potable water.

Rainwater and gray water irrigation systems require no backflow protection on the potable water service as long as each system meets two requirements:

1) it is gravity feed only
2) it is for a residential site

If a pump of any kind is installed on the rainwater or gray water system, or if the system is installed on a commercial site, then backflow protection is required to be installed at the water meter for protection of the potable water system. An RPA must be installed when pumps are used for rainwater or gray water systems. No other types of backflow devices are acceptable.