

# Backflow Devices

Dual Check Valve



Hose Bib Vacuum Breaker



Atmospheric Vacuum Breaker



**For any questions or additional information  
please contact (801) 544-8112 or (801) 497-7121**

## Backflow Prevention



Identifying and eliminating or protecting cross-connections is a matter of public health !

- The Plumbing Code and the Utah Public Drinking Water Rules require that all cross-connections be eliminated or protected against backflow by installing an approved backflow device or assembly that will insure that no impurities or contaminants are introduced to the public drinking water supply.
- Many public drinking water systems are contaminated each year by pollutants or contaminants that backflow into the water system through unprotected cross connections.

**Where pressure irrigation is available, no connection of an irrigation system to a culinary water service shall be allowed. Dual, or "swing", connections that allow for switching use back and forth between City culinary water and any other water source are prohibited.**



# Definitions

- **Backflow** shall mean the undesirable reversal of flow of water or mixtures of water and other liquids, gases, or other substances into the distribution pipes of the potable water supply from any source.
- **Cross Connection** shall mean any actual or potential connection between a potable water system and any other source or system through which it is possible to introduce into the public drinking water system any used water, industrial fluid, gas or substance other than the intended potable water.
- **Backpressure** shall mean the phenomenon that occurs when the customer's pressure is higher than the supply pressure. This could be caused by an unprotected cross connection between a drinking water supply and a pressurized irrigation connection, a boiler, a pressurized industrial process, elevation differences, air or steam pressure, use of booster pumps or any other source of pressure.
- **Backsiphonage** shall mean a form of backflow due to a reduction in system pressure which causes a sub-atmospheric pressure to exist at a site in the water system.
- **Pollutant (non-health)** shall mean any substance introduced into the public drinking water system which does not create a threat to the public health but which does adversely and unreasonably affect the aesthetic quality of the water.
- **Contaminate (health)** shall mean any substance introduced into the public drinking water system which creates a threat to the public health such as poisoning, pathogenic organisms or any other public health concern.
- **Degree of Hazard** shall mean either a **pollutant** (non-health) or **contaminate** (health) hazard that may be intro-

The appropriate method of backflow protection to be utilized will be based on the degree of hazard, the type of backflow conditions present, as well as the specific installation criteria for each method of backflow protection

Degree of Hazard	Type of Backflow	Approved Method of Protection
High or Low	Backsiphonage & Backpressure	Air Gap
High or Low	Backsiphonage & Backpressure	Reduced Pressure Zone Backflow Prevention Assembly (RP)
High or Low	Backsiphonage <u>ONLY</u>	Pressure Vacuum Breaker (PVB)
High or Low	Backsiphonage <u>ONLY</u>	Spill-Resistant Vacuum Breaker (SVB)
High or Low	Backsiphonage <u>ONLY</u>	Atmospheric Vacuum Breaker (AVB)
Low	Backsiphonage & Backpressure	Double Check Valve Assembly (DC)
Low	Backsiphonage <u>ONLY</u>	Hose Bibb Vacuum Breaker (HBVB)
**Low	Backsiphonage <u>ONLY</u>	Dual Check Device

# Backflow Assemblies

## Reduced pressure Zone Assembly



## Double Check Valve Assembly



## Pressure Vacuum Breaker



## Spill resistant Pressure Vacuum Breaker

