

## Keep Your Water Supply Safe



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## Important Information for All Irrigation System Installers

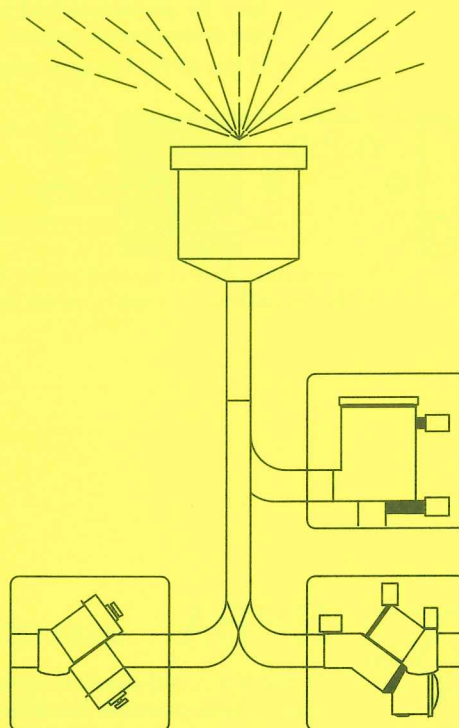
Some laws and regulations regarding backflow protection and approval of type of pipe and backflow assembly used may vary depending upon local requirements.

For more specific information we urge you to contact your water supplier.

HELP US PROTECT YOUR  
DRINKING WATER

## Important Information for All Irrigation System Installers

# Home Irrigation Safety



**Do Not Let Your Irrigation System  
Contaminate The Water You Drink**

Revised 7/16/2008

## Backflow Prevention Alternatives

### For Home Irrigation Systems

Irrigation systems make watering lawns and gardens easier and save time, BUT, water that may be contaminated by weed killers and/or fertilizers can be back-siphoned (backflow) into your drinking water. Irrigation systems not protected by approved backflow prevention assemblies could endanger the health of a household neighborhood or community.

**ALL IRRIGATION SYSTEMS...new or existing...MUST BE EQUIPPED** with an approved backflow prevention assembly. Only properly installed, state-approved backflow prevention assemblies meet the plumbing code and provide health protection for for your family and neighbors. Contact your water supplier for a list of state-approved assemblies and certified testers.

### FREEZE PROTECTION:

It is recommended that all Backflow Prevention Assembly installations have a union on each side of the assembly, so it can be stored in a warm place during periods of freezing temperatures.

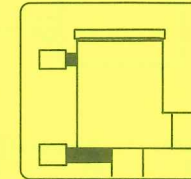
It is recommended that a high quality stop and drain valve (Mueller Orseal II; Ford Ball Valve) be installed below ground level (5' depth if within 20' of the water meter) before the backflow assembly.

This is to allow the water to drain down to the same level as the service line and to help protect it from freezing. Backflow devices may be hooked up to "frostfree" hose bibbs coming off of the house (no stop and waste is required) if flow and inside noise is not a problem.

### PLEASE NOTE:

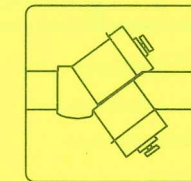
**ALL IRRIGATION SYSTEMS** supplied by public water systems **REQUIRE A PLUMBING PERMIT** before installation. All piping and materials upstream [before] the backflow prevention assembly must be of a type which is approved by the International Association of Plumbing and Mechanical Officials.

## Backflow Prevention Assemblies



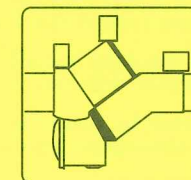
### **PRESSURE VACUUM BREAKER (PVB)**

...more sophisticated  
...more versatile  
...requires annual testing  
by certified tester



### **DOUBLE CHECK VALVE ASSEMBLY (DCVA)**

...highly versatile  
...requires annual testing  
by certified tester



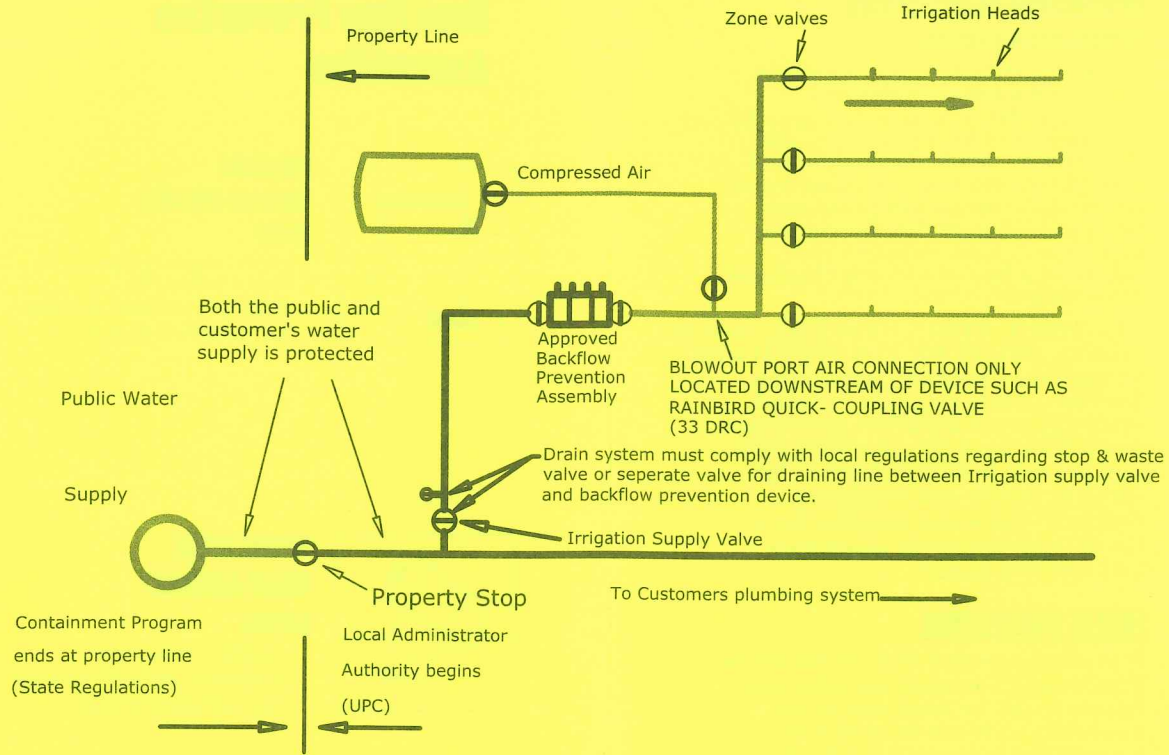
### **REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA)**

...usually most expensive  
...offers most protection  
...requires annual testing  
by certified tester

Installation requirements for each  
type of backflow prevention assembly

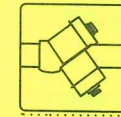
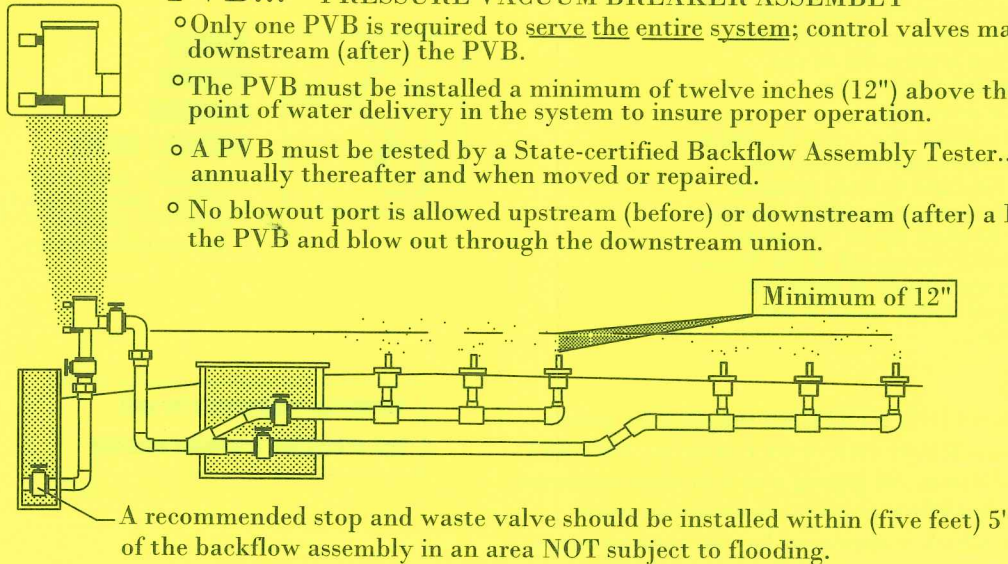


## Approved Backflow Protection With Properly Installed Blowout Port ☺



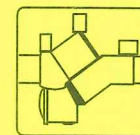
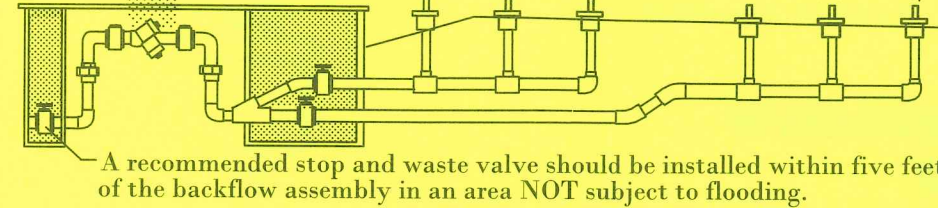
### PVB... PRESSURE VACUUM BREAKER ASSEMBLY

- Only one PVB is required to serve the entire system; control valves may be located downstream (after) the PVB.
- The PVB must be installed a minimum of twelve inches (12") above the highest point of water delivery in the system to insure proper operation.
- A PVB must be tested by a State-certified Backflow Assembly Tester...when installed, annually thereafter and when moved or repaired.
- No blowout port is allowed upstream (before) or downstream (after) a PVB. Remove the PVB and blow out through the downstream union.



### DCVA... DOUBLE CHECK VALVE ASSEMBLY

- Only one DCVA required to serve the entire system; control valves may be located downstream (after) the DCVA.
- The DCVA may be installed a minimum of twelve inches (12") above ground level. However, often below ground installations of DCVA's are preferred.
- Below ground installations for 3/4" and 1" DCVA'S require a minimum vault size of 16" wide X 24" long X 12" high. Larger vaults may be required to meet minimum clearance requirements.
- "Y" pattern assemblies shall be installed on their side with test cocks facing up; or test cocks to the side depending upon manufacturer's recommendations.
- Minimum of 4" between sides of assembly (including test cocks) and side of vault
- Minimum of 6" between center of shut off valves and sides of vault
- Minimum of 6" between lowest point of assembly and bottom of vault
- A DCVA must be tested by a State-certified Backflow Assembly Tester...when installed, annually thereafter and when moved or repaired.
- No blowout port is allowed upstream (before) a DCVA, Blowing out the system may be accomplished by utilizing this port or by blowing through the downstream union.
- If the DVCA is not removed to prevent freezing, it must be thoroughly drained.



### RPBA... REDUCED PRESSURE BACKFLOW ASSEMBLY

A RPBA is required on systems that impose an extreme danger to the drinking water from possible backflow. Irrigation systems that allow the injection of fertilizers and/or herbicides into the water must have this higher degree of backflow protection. Such systems must receive written approval from your water supplier prior to their installation. Contact your water supplier for details.