# **IRRIGATION PERMIT AND POLICY INFORMATION**

Telephone: 303.681.2050

Fax: 303.681.2051

www.ppwsd.org

An irrigation permit and inspection is required of all irrigation and landscape designs within the District. The permit system ensures District standards regarding backflow devices, water conservation, and the 2,500 square foot limit of irrigated land per dwelling are met. Note: <u>This permit is not an affirmation that the landowner meets all local, county, state or federal requirements.</u>

Date:	Owner Name:	
Lot size (in acres):	Service Address:	
Irrigated Landscape Square Fo	otage:	Customer received Regulations: Yes(_) No (_)
Type of Backflow Device:		Meets District Standards: PVB() RPBPD()
Are annual certified tests availa	able: Yes (_) No (_) {If "no" pl	ease explain policy regarding State Law.}
Map of Irrigated Area:		
Owner's Signature:		Date:
Please return this completed	form together with the ins	pection/certification report from a certified
BFPA (Backflow Prevention	Assembly) tester to PPWS	SD.

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#### Introduction

The Perry Park Water & Sanitation District (PPWSD) would like to take this opportunity to remind and update the valued members and water consumers of this community regarding the precautions we all must take to ensure we always have sufficient water supplies. As reported often in the Colorado news, an ever increasing number of communities are either running out of water or their wells are drying up.

The residents in the PPWSD can be assured that the District continues to be proactive in ensuring a long term renewable water supply. We have senior renewable water rights dating back to 1867, as well as non-renewable ground water rights. While this puts the District in a favorable position regarding water supply, we must always strive to be good stewards of our water.

The District was created to supply water to its customers for predominantly in-home use only, with the anticipation of natural landscaping outdoors. However, as the District has developed, many have incorporated irrigated landscaping. During the irrigation season, homes with irrigated landscaping (i.e. sprinkler or dripper systems) can utilize up to 10 times as much water as those homes without irrigated/watered landscaping.

### PPWSD REGULATION 4.2.4.2k: Sprinkler Systems

"Use of these for irrigation is <u>not</u> encouraged. However, if a sprinkler system is to be used, it must have an approved backflow device. The District requires that all irrigation systems and backflow devices be inspected and certified prior to actual use and annually thereafter, and the inspection results must be presented to the District. (A double check valve is not permitted in a sprinkler system). It is expressly stipulated that the Board may, if deemed necessary in its sole discretion, restrict the use of outdoor sprinkler systems and other uses. It is anticipated that such restrictions will become increasingly necessary as the development expands in the District." Note: Pursuant to Resolution 01-72, effective June 20, 2001, "any new irrigation will be limited to a maximum of 2,500 square feet. Any existing dwelling with an irrigation system wanting to add to their system, will be limited to a 2,500 square foot maximum total, new and existing."

Please call the District office at 303-681-2050 to get a no-cost permit or to schedule an inspection of your system. State and Federal water quality laws require approved backflow devices. Failure to comply with District, State, or Federal water quality laws will constitute immediate disconnection until all violation conditions are eliminated.

### **Certified Testers**

To find a certified tester you can consult with your plumber or contactor, these professionals usually hold their own certification or know someone who can test your assembly. Whomever you select to test your BFPA must be certified to do so. Testers must hold a current certification from either The American Backflow Prevention Association, or The American Society of Sanitary Engineers.

If you need assistance finding a certified tester, please contact the District at 303-681-2050 or e-mail <a href="mailto:ppwsd@comast.net">ppwsd@comast.net</a>.

## **BACKFLOW PREVENTION ASSEMBLY INFORMATION**

Telephone: 303.681.2050

Fax: 303.681.2051

www.ppwsd.org

TO systiam

In accordance with District Regulation 4.3 (copy in Appendix A), landscape watering/sprinkler/irrigation systems will be designed for cross-connection control and backflow control. Reduced pressure backflow preventers will be installed above ground as shown in Figure A. The unit should be placed at least twelve inches (12") above the finish grade to allow clearance for repair work. A concrete slab at finish grade is recommended. Proper drainage should be provided for the relief valve and may be piped away from the location, provided it is readily visible from above grade and the relief valve is separated from the drain line by a minimum of double the diameter of the supply line.

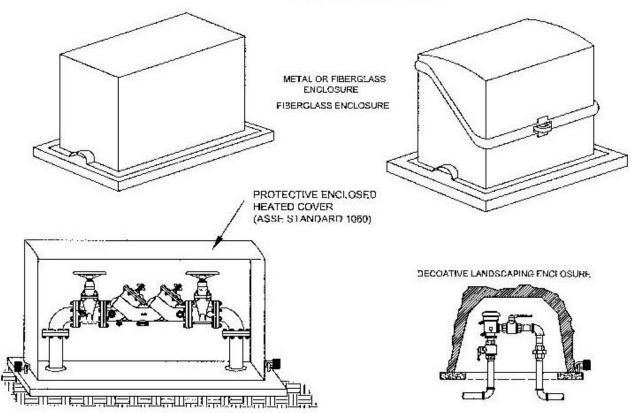
PROTECTIVE ENCLOSED HEATED COVER (ASSE STANDARD 1060) RPZ\_OR\_RP (BACKFLOW DEVICE) OUTSIDE EDGE OF PIT/MH 12" MIN 16° MAX 5 MAX EXISTING GROUND LINE WATER METER PIT/MH 6' MIN (PER SPEC.'S) 7" MAX

From meter pit or house

Figure A

Continued on the next page.

FROM WATER MAIN



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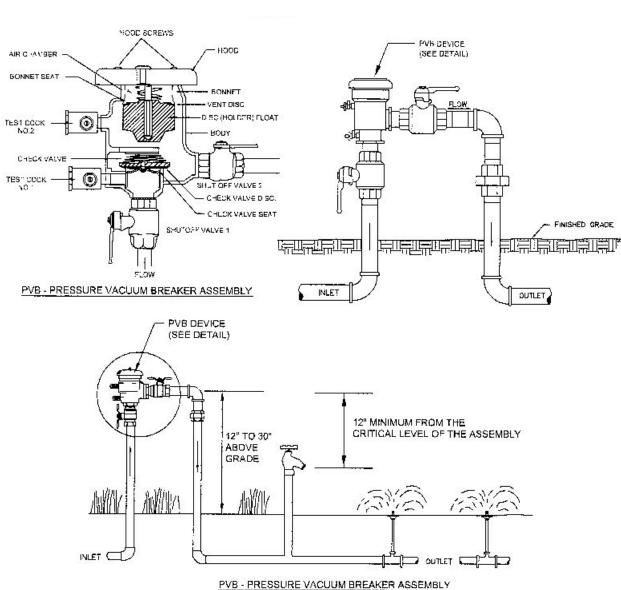
# ALTERNATE CONFIGURATION AND ENCLOSURES

1. Outdoor Enclosures for Backflow Prevention Assemblies to conform to ASSE Standard No.1060

Pressure type vacuum breakers may be installed without regards to down stream valving, making it possible to isolate an entire lawn sprinkler system with a single unit when properly located. This assembly must not be installed where it will be subject to back pressures and should be installed at least twelve inches (12") above the highest outlet. The vacuum breaker should be installed where it will be accessible for periodic testing and where, if slight spillage should occur, it would not be objectionable. See Figure B.

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Figure B



NOTE: Residential irrigation backflow prevention assemblies must be winterized correctly to prevent damage.

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### **Resources for Further Information**

EPA Office of Ground Water & Drinking Water

http://water.epa.gov/drink/

**EPA Cross Connection Control** 

http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm

Colorado Backflow Prevention Association

http://www.backflow.org

American Backflow Prevention Association

http://www.abpa.org/

**Durable Plant Selection Program** 

www.plantselect.org

Denver Botanic Garden

www.botanicgardens.org

Colorado State University Plant Selections

www.ext.colostate.edu/ptlk/1907.html

**CSU** Cooperative Extension

http://www.ext.colostate.edu/index.htmll

**Douglas County Noxious Weed Management** 

http://www.douglas.co.us/land/weed-management/

Firewise Communities

http://www.firewise.org

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Appendix A – Regulation #4.3

### 4.3 Cross-Connection Control and Backflow Control

- 4.3.1 <u>Purpose</u>. This section is intended to provide the rules and regulations for the District to meet federal, state specifically, cross-connection and backflow control are to:
  - a. Protect the public water system from the possibility of contamination or pollution by isolating within its customers' internal distribution system(s) or its customers' private water system(s) such contaminants or pollutants which could backflow or backsiphon into the public water system.
  - b. Promote the elimination or control of existing or potential cross-connections, between its customers' potable water system(s) and sources of non-potable water from plumbing fixtures, boilers, industrial piping systems, etc.
  - c. Provide for the maintenance of a continuing program of cross-connection control which will systematically and effectively prevent the contamination or pollution of the public water system.
- 4.3.2 Policy. The paragraphs which follow outline the policy bases for cross-connection control:
  - 4.3.2.1 <u>Denial of Water Service</u>. The District will not permit the installation of maintenance of water service connections unless the water supply is protected as required by State laws and regulations and these Rules and Regulations. Service of water to any premises shall be discontinued by the District if a backflow prevention device required by these regulations is not installed, tested and maintained, or if it is found that a backflow prevention device has been removed, by-passed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.
  - 4.3.2.2 <u>Degree of Hazard Concept</u>. An approved backflow preventer of a type depending on the degree of hazard shall be installed. Such a device shall be installed at or near the property line or immediately inside the building being served; but, in all cases, before the first branch line leading off the service line wherever the following conditions exist:
    - (a) <u>Auxiliary Water Supply</u>. In the case of premises having an auxiliary water supply which is not or may not be of safe bacteriological or chemical quality and which is not acceptable as an additional source by the District, the public water system shall be protected against backflow from the premises by installing a reduced pressure principle backflow preventer in the service line.
    - (b) <u>Presence of Potentially Dangerous Fluids</u>. On premises where industrial fluids or any other substances are handled in such a fashion as to create an actual or potential hazard to the public water system, the public system shall be protected against backflow from the premises by installing a reduced pressure principle backflow preventer in the service line.
    - (c) <u>Uncontrollable Cross-Connections</u>. In the case of premises having (1) internal cross-connections that cannot be permanently corrected and controlled, or (2) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist, the public water system shall be protected against backflow from the premises by installing a reduced pressure principle backflow preventer in the service line.
  - 4.3.2.3 <u>Inspection</u>. The customer's system shall be open for inspection at all reasonable times to authorized representatives of the District to determine whether cross-connections or other structural or sanitary hazards, including violations of these Rules and Regulations, exist. Whom such a condition becomes known, the District shall deny or immediately discontinue service to the premises by providing for a physical breaking the service line until the customer has corrected the condition(s) in conformance with State and "agency" statutes relating to plumbing and water supplies and the regulations adopted pursuant thereto.
- 4.3.3 <u>Type of equipment required</u> The type and size of cross-connection or backflow prevention equipment required will be determined on a case by case inspection of the premises and/or review of plans.
- 4.3.4 <u>Backflow Prevention Device Approval</u> Any backflow preventer required herein shall be of a model and size approved by the District. The term "approved Backflow Prevention Device" shall mean a device that has been manufactured in full conformance with the standards established by the American Water Works Association entitled:
- AWWA C506-78 Standards for Approved Backflow Prevention Devices: and, has met completely the laboratory and field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California established by: Specifications of Backflow Prevention Devices #69-2 dated March 1969 or the most current issue.
- Said AWWA and FCCC&HR Standards and specifications are hereby adopted by the District. Final approval shall be evidenced by a "Certificate of Approval" issued by an approved testing laboratory certifying full compliance with said AWWA standards and FCCC&HR Specifications.
- 4.3.5 <u>Inspection of Backflow Prevention Installation</u> It shall be the duty of the customer-user at any premise where backflow devices are installed to have certified inspections and operational tests made at least <u>once per year</u>. In those instances where the District reasonably deems it necessary certified inspections may be required at more frequent intervals. These inspections and tests shall be at the expense of the water user and shall performed by a certified inspection/tester. The backflow shall be kept in working order at the expense of the user and records of repairs/testing shall be kept and made available to the District.
- 4.3.6 Existing Cross-Connections. Within a reasonable time following the adoption of these Rules and Regulations existing cross-connections between the public and any establishments that may exhibit potential health hazards.
- 4.3.7 <u>Specific System Requirements</u>. State and Local regulations will dictate type of device required however in no case shall <u>atmospheric vacuum breakers</u> or <u>double check valve assemblies</u> be allowed. Irrigation systems must have an approved backflow prevention device.
- 4.3.8 <u>Violations and penalties</u>. If a customer fails to correct or remove a violation, the District may, if in its judgement an imminent health hazard exists terminate water service to the premises. Additional fines or penalties may also be invoked following termination of service.
- 4.3.9 <u>Severability</u>. If any provision of section 4.3, or its application to any person or circumstance is held invalid, the application of such provision to other persons or circumstances, and the remainder of Section 4.3, shall not be affected thereby.

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