

**Cross Connection Regulations**  
**Bay Hills Water Association**

RECEIVED  
JUN 17 2003

TECHNICAL SERVICES  
DRINKING WATER PROGRAM

Under the authority granted the Board of Directors (Board) of the Bay Hills Water Association (BHWA), an Oregon Corporation, to prescribe rules and regulations for the water system serving BHWA members and pursuant to Oregon Administrative Rules (OAR) Chapter 333, Division 61 requiring cross connection control and backflow protection devices the Board adopts the following cross connection regulations for members of BHWA receiving water services from the BHWA water system:

Contents

**Section**

- 1 Definitions
- 2 Purpose
- 3 Cross Connections Regulated
- 4 Backflow Prevention Device Requirements
- 5 Installation Requirements
- 6 Access to Premises
- 7 Annual Testing and Repairs
- 8 Cost of Compliance
- 9 Termination of Service
- 10 Effective Date

**Section 1 Definitions**

- 1.1 "Approved Backflow Device" means a device to counteract backpressure or prevent backsiphonage back into the BHWA water system. This device must appear on the list of approved devices issued by the Oregon Health Division.
- 1.2 "Auxiliary Supply" means any water source or system other than the BHWA system that may be available on the premises.
- 1.3 "Backflow" means the flow in the opposite direction to the normal flow or the introduction of any foreign liquids, gases, or substances into the BHWA water system.
- 1.4 "BHWA Water System" means the Bay Hills Water Association water system including but not limited to surface water storage, treatment plant, treated water storage, and all distribution lines to the service connection or connections with association members' premises.
- 1.5 "Contamination" means the entry into or presence in the BHWA water system of any substance that may be deleterious to health and/or water quality.
- 1.6 "Cross Connection" means any physical arrangement where a public water system (such as the BHWA system) is connected directly or indirectly with another non-drinkable water system or source or auxiliary system, including but not limited to sewer, drain conduit, swimming pool, jacuzzi or spa (indoors or outdoors), storage reservoir, plumbing fixture, swamp cooler, or

RECEIVED  
MAY 17 2005  
WATER SERVICES  
DIVISION

any other device which contains, or may contain, contaminated water, sewage, or other unknown liquid which may be capable of contaminating the public water system as a result of backflow. Cross Connections may be either permanent or temporary devices; for example an exterior hose used to fill a swimming pool or spa is a cross connection.

- 1.7 "Degree of Hazard" is derived from the evaluation of a health or pollution hazard.
- 1.8 "Health or System Hazard" means an actual or potential threat of contamination or physical damage to the BHWA water system or any individual members potable water obtained from that system.
- 1.9 "Potable Water Supply" means any water intended or used for human consumption or domestic use.
- 1.10 "Premises" means any BHWA member's land to which water is provided by the BHWA water system, including but not limited to all improvements and structures on that land.
- 1.11 "Reduced Pressure Backflow Assembly" or "RP Device" is an assembly containing two independently acting pressure differential check valves together with a hydraulically operated, mechanically independent pressure differential relief valve located between the check valves and below the first check valve. This device must appear on the list of approved devices issued by the Oregon Health Division.

## **Section 2 Purpose**

The purpose of these regulations is to protect the BHWA water supply from contamination or pollution due to any existing or potential cross connections.

## **Section 3 Cross Connections Regulated**

No cross connections shall be created, installed, maintained or used in connection with the BHWA water system except in accordance with these regulations.

## **Section 4 Backflow Prevention Device Requirements**

- 4.1 Backflow prevention devices shall be installed at every existing service connection based upon the degree of hazard, and at every new service connection. BHWA, through its operator or Board of Directors, may request certification of a properly installed device from existing services, and shall receive certification on all newly installed services after the effective date of these regulations.
- 4.2 BHWA may employ a qualified cross connection inspector to inspect any or all members' premises to insure compliance with these regulations. If the inspector finds a member's premises is not compliant, the costs of the inspection, in addition to any other costs or compliance requirements set forth by the inspector or these regulations, shall be borne solely by the member.

## **Section 5 Installation Requirements**

To insure proper operation and accessibility of backflow devices, the following requirements apply to the installation of these devices

- 5.1 No part of the backflow prevention device shall be submerged in water or installed in a location subject to flooding. If installed in a vault or basement, adequate drainage shall be installed.
- 5.2 All test cocks must have plugs.
- 5.3 Devices must be installed at the point of delivery of the water supply, before any branch in the line. Alternative locations must be approved by BHWA prior to installation.
- 5.4 Backflow device prevention assemblies shall be the type and model approved by the Oregon Health Division.
- 5.5 Devices must be protected from freezing and other severe weather conditions.
- 5.6 Only devices specifically approved by the Oregon Health Division for vertical installation may be installed vertically.
- 5.7 The device shall be readily accessible with adequate room for maintenance and testing. Devices 2 inches and smaller must have a minimum clearance of 12 inches on the backside, 24 inches on the test cock side, 12 inches below the device and 36 inches above the device. "Y" pattern double check valve assemblies shall be installed so that the checks are horizontal and test cocks face upward.
- 5.8 A device installed inside of a premises, 4 inches or larger and installed 4 inches above the floor, must be equipped with a rigid and permanently installed scaffolding meeting the requirements of the Oregon Occupational Safety and Health Codes.
- 5.9 RP devices may be installed inside a vault only if the relief valve discharge can be drained to daylight through a "boresight" type drain. The drain shall be of adequate capacity to carry the full rated flow of the device and shall be screened on both ends.
- 5.10 An approved air gap shall be located at the relief valve orifice. This air gap shall be at least twice the inside diameter of the incoming supply line as measured vertically above the top rim of the drain and no case less than 1 inch.
- 5.11 Upon completion of installation of any additional devices within a premise, the BHWA shall be notified and all devices certified as inspected and tested and a copy of the certification provided to BHWA.
- 5.12 Any water pressure drop caused by the installation of a backflow device is not the responsibility of BHWA.
- 5.13 It is the responsibility of the premise owner to eliminate the possibility of thermal expansion.

## **Section 6 Access To Premises**

BHWA Board members, operators, contractors or other Board authorized persons shall have access during reasonable hours to all parts of a premise to which water is supplied. However, if any water user refuses access to a premise or to the interior of a structure at reasonable times and upon reasonable notice for inspection by a cross connection inspector authorized by BHWA, a reduced

00564  
BAY  
HILLS  
WATER  
ASSN

pressure backflow assembly will be required to be installed within 30 days at the service connection to that premise or termination of service under Section 9 of these regulations will take place.

**Section 7 Testing and Repairs**

All testable backflow devices installed within BHWA shall be tested immediately upon installation and at least annually thereafter at the premise owner's expense. Premises owner shall be responsible for selecting a qualified tester and providing a certified copy of test results to BHWA. Any device not functioning properly shall be promptly repaired or replace at the expense of the premise owner. Failure to repair or replace may lead to immediate termination of service under Section 9 of these regulations.

**Section 8 Costs of Compliance**

All costs associated with purchase, installation, inspections, testing, replacement, maintenance, parts and repair of a backflow assembly are the financial responsibility of the premises owner, except for inspection costs under Section 4.2 for a fully compliant system.

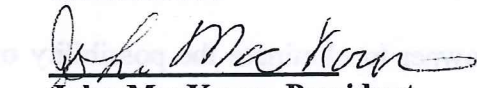
**Section 9 Termination of Service**


Failure on the part of the premises owner to meet any of the requirements of these regulations, including but not limited to proper installation, maintenance, repair, and use of a cross connection device or backflow device, is sufficient cause for the immediate discontinuance of BHWA water service to the premises. Service will not be restored until such conditions or defects are corrected and an appropriate reconnection fee as set by the BHWA Board has been paid.

**Section 10 Effective Date**

These regulations were adopted by the BHWA Board of Directors on March 16, 2002 and shall become effective immediately.

Approved this 16<sup>th</sup> day of March, 2002 by the Bay Hills Water District Board of Directors.

  
**John MacKown, President**

Attest:   
**Wayne Belmont, Secretary**

PW# 4100564 BAY HILLS WATER ASSOCIATION