

METOLIUS MEADOWS PROPERTY OWNERS ASSOCIATION, INC.

CROSS CONNECTION CONTROL POLICY

~~41-20~~ 41-90192

Pursuant to Chapter 333 Division 61 of the Oregon Administrative Rules, it is the responsibility of Metolius Meadows Property Owners Association, Inc. to protect its drinking water by instituting and enforcing a cross connection control policy. Therefore, the following regulations are hereby adopted.

1. DEFINITIONS.

1.1 "MMPOA" means Metolius Meadows Property Owners Association, Inc., an Oregon non-profit corporation.

1.2 "OAR" means Oregon Administrative Rules of the Health Division of the Oregon Department of Human Resources.

1.3 "Cross Connection" means any physical arrangement where a public water system is connected, directly or indirectly, with any other water system or auxiliary system, sewer, drain conduit, swimming pool, storage reservoir, plumbing fixture, swamp coolers, or any other device which contains, or may contain, contaminated water, sewage, or other liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water system as a result of backflow. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices, or other temporary or permanent devices through which, or because of which, backflow may occur are considered to be cross connections.

1.4 "Backflow" means the flow in the direction opposite to the normal flow or the introduction of any foreign liquids, gases, or substances into the water distribution system of MMPOA.

1.5 "Backflow Prevention Device" means a device to counteract back pressures or prevent backsiphonage.

1.6 "Approved" means the device must appear on the list of approved devices issued by the Oregon Health Division.

1.7 "Reduced Pressure Principle Device" means an approved device containing two independently-acting approved check valves together with a hydraulically-operated, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The device shall include properly located test cocks and tightly closing shutoff valves at the end of the device.

1.8 "Pressure Vacuum Breaker" means an approved device consisting of a spring-loaded check valve loaded to the closed position, an independently-operating air inlet valve loaded to the open position and installed as a unit with and between two resilient seated shutoff valves and having suitable connections for testing. It is designed to protect against backsiphonage only.

1.9 "Double Check Valve Assembly" means an approved device consisting of two independently-operating check valves, loaded to the closed position by springs or weights, and installed as a unit with and between two resilient seated shutoff valves and having suitable connections for testing.



1.10 "Premises" means any piece of land to which water is provided, including all structures, improvements, and additions.

1.11 "User" means the owner or owners of the premises.

2. PURPOSE. The purpose of these regulations is to protect the MMPOA water supply from contamination or pollution due to any existing or potential cross connection.

3. CROSS CONNECTIONS REGULATED.

3.1 No cross connection shall be created, installed, used, or maintained within the territory served by MMPOA except in accordance with these regulations.

3.2 MMPOA has an active program to identify and evaluate the premises where potential cross connections exist. Each user shall read, sign, and return to MMPOA a "Cross Connection Control Notice"; failure by the user to sign and return said Notice will be sufficient grounds for MMPOA to deny or discontinue water service to the user's premises.

4. BACKFLOW PREVENTION DEVICE REQUIREMENT. Approved backflow prevention devices shall be installed at the expense of the user, either at the service connection or within the premises, as determined by a cross connection inspector employed by MMPOA, in each of the following circumstances:

4.1 If the nature and extent of any activity on the premises, or the materials used in connection with any activity on the premises, or materials stored on the premises, could contaminate or pollute the drinking water supply in any way.

4.2 If the premises have one or more existing or potential cross connections as defined in paragraph 1.3 above.

4.3 If internal cross connections are not correctable, or intricate plumbing arrangements make it impractical to ascertain whether or not cross connections exist.

4.4 If there is a history of cross connections being established or re-established.

4.5 If entry is unduly restricted so that inspections for cross connections cannot be made with sufficient frequency or with sufficient notice to assure that cross connections do not exist.

4.6 If materials of a toxic or hazardous nature are being used such that, if backsiphonage should occur, a health hazard could result.

4.7 If there is any mobile apparatus which uses the MMPOA system or water from any premises within the MMPOA system.

4.8 If the installation of an approved backflow prevention device is deemed to be necessary to accomplish the purpose of these regulations.

5. INSTALLATION REQUIREMENTS AND INSTRUCTIONS. To ensure proper operation and accessibility of all backflow prevention devices, the following requirements shall apply to the installation of these devices.

5.1 Backflow prevention devices must be installed at the point of delivery of the water supply, before any branch in the line, on private property located just inside of the property line.



Alternate locations must be approved in writing by MMPOA prior to installation.

5.2 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 provided.

5.3 Backflow prevention devices must be protected from freezing and other severe weather conditions.

5.4 All backflow prevention devices shall be of a type and model approved by the Oregon Health Division and approved by MMPOA prior to installation.

5.5 Only backflow prevention devices specifically approved by the Oregon Health Division for vertical installation may be installed vertically.

5.6 The backflow prevention device shall be readily accessible with adequate room for maintenance and testing.

5.7 If written permission is granted to install the backflow prevention device inside a building, the backflow prevention device shall be readily accessible during regular working hours.

5.8 Reduced pressure principle devices may be installed in a vault only if 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.

5.9 All backflow prevention devices shall be installed in accordance with OAR. A copy of OAR 333-61-099, Backflow Device Installation Standards, is attached for informational purposes.

5.10 MMPOA shall determine the minimum approved backflow prevention device or protection required, pursuant to OAR Chapter 333-61-070. Where a backflow prevention device is deemed necessary, the model, size and description of the device and plans for its installation shall be submitted to MMPOA for approval prior to installation. The user is responsible for any expenses incurred as a result of the user's failure to obtain MMPOA approval prior to installation of any backflow prevention device.

5.11 All existing or potential cross connections, including but not limited to the following, shall have an approved backflow prevention device as required by MMPOA: irrigation systems, hot tubs, spas, jacuzzis, fire sprinkler systems, active solar water heating systems, swimming pools, wading pools, hose bibs where the hose may be used to fill a pool or tub or where the hose may be used to spray any toxic or hazardous substances, any connection to a pond, creek, ditch, canal, or other water source that is not part of the MMPOA drinking water system, and any other existing or potential cross connection where a backflow prevention device is deemed necessary by MMPOA.

5.12 Backflow prevention devices installed before the effective date of these regulations which were approved at the time they were installed but are not on the current list of approved devices shall be permitted to remain in service provided they are properly maintained, are commensurate with the degree of hazard pursuant to OAR Chapter 333-61-070(6), are tested at least annually, and perform satisfactorily. When devices of this type are moved, or require more than minimum maintenance, or are on



services that are modified, changed in size or remodeled, they shall be replaced by backflow prevention devices which are on the list of approved devices.

5.13 The installation of a backflow prevention device on the water service line will eliminate the thermal expansion of hot water into the distribution system. Therefore, MMPOA hereby notifies the user that is the user's responsibility to maintain temperature pressure relief valves within the premises plumbing.

6. ACCESS TO PREMISES. Authorized employees of MMPOA shall have access during reasonable hours to all parts of premises, including within a building, to which MMPOA supplies water. If any user refuses such access, a reduced pressure principle device will be required to be installed at the service connection to that user's premises, or service will be discontinued.

7. TESTING AND REPAIRS. All testable backflow prevention devices installed within the territory served by MMPOA shall be tested by a State-certified tester immediately upon installation and upon being moved and at least once a year thereafter. Any such device found not functioning properly shall be promptly repaired or replaced by the user. If any such device is not promptly repaired or replaced, MMPOA may deny or discontinue water service to the premises. All costs of testing and repairs are the responsibility of the user. Reports on the tests shall be prepared by the certified tester and copies of the reports shall be provided to the user and to MMPOA. MMPOA shall prepare a summary of the tests performed and shall submit that summary once per calendar quarter to the Oregon Health Division.

8. COSTS OF COMPLIANCE. All costs associated with the purchase, installation, inspection, testing, replacement, maintenance, parts, and repair of any backflow prevention device are the responsibility of the user.

9. TERMINATION OF SERVICE. Pursuant to OAR Chapter 333-61-070, where MMPOA has reasonable cause to believe that an existing or potential cross connection is located on a user's premises, MMPOA shall deny or discontinue water service to those premises until an appropriate backflow prevention device is installed or until the cause of the hazard is eliminated. Failure on the part of any user to physically separate all cross connections and to discontinue the use of all cross connections except in accordance with these regulations is sufficient cause for immediate discontinuance of water service to that user's premises.

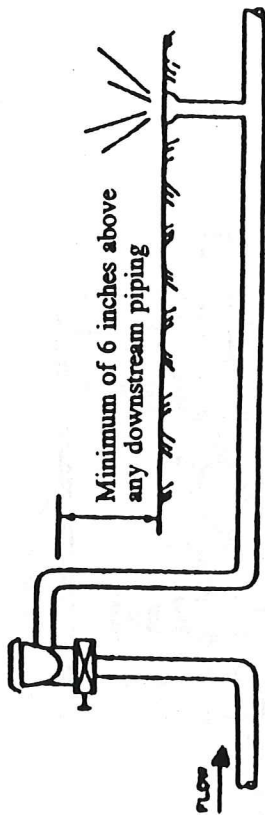
10. EFFECTIVE DATE. These regulations and Cross Connection Control Policy shall be effective as of July 1, 1992.

11. AMENDMENTS. These regulations and Cross Connection Control Policy may be amended, revised or replaced at any time by MMPOA.

APPROVED AND ADOPTED by the Board of Directors of Metolius Meadows Property Owners Association, Inc. on June 29, 1992.

# 333-61-099 BACKFLOW DEVICE INSTALLATION STANDARDS

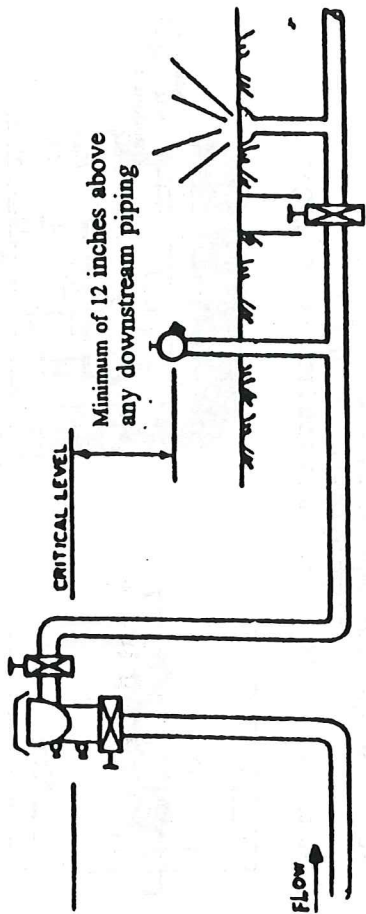
## 1. Atmospheric Vacuum Breaker TYPICAL INSTALLATION OF AN AVB



- NOTE: 1. Absolutely no means of shut-off on the downstream or discharge side of the vacuum breaker.
2. For intermittent use only. Must not be pressurized for more than 12 hours in any 24 hour period.
  3. Shall not be subject to any backpressure.
  4. Shall not be installed in dusty or corrosive atmospheres.
  5. Shall not be installed where subject to flooding.

## 2. Pressure Vacuum Breaker TYPICAL INSTALLATION OF A PVB

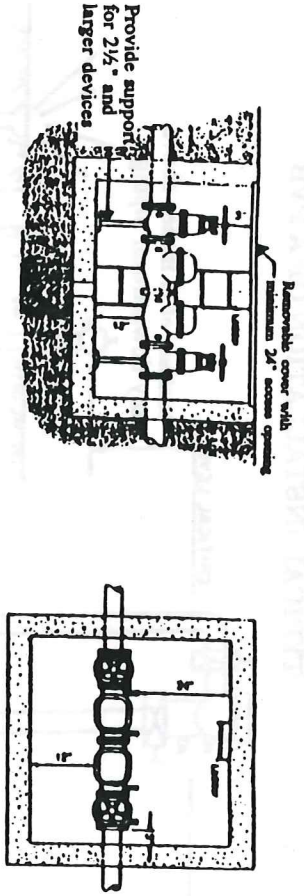
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- NOTE: 1. Downstream side of vacuum breaker may be maintained under pressure by a valve. But, there may be absolutely no means of imposing pressure by pump or other means.
2. PVBs are designed to protect against back siphonage only, not backpressure.
  3. It shall be installed where occasional water discharge from the device caused by pressure fluctuations will not be objectionable.
  4. Adequate spacing shall be available for maintenance and testing.
  5. Shall not be subject to flooding.

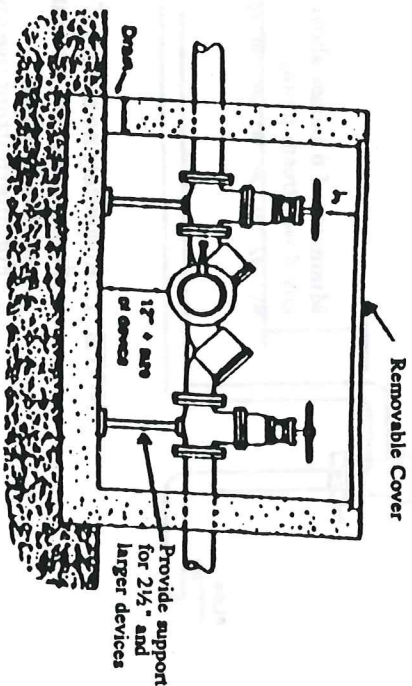


3. Double Check Valve Assembly  
(3) MINIMUM CLEARANCE FOR DCVA INSTALLATION



- NOTE: 1. Bottom and side clearances apply when devices are installed inside building.
2. DCVAs may be installed vertically as well as horizontally provided that the device assembly:
    - a. Is internally spring loaded -- not weighted checks.
    - b. Is 4 inches or smaller.
    - c. Is recommended by the manufacturer for vertical installation.
    - d. Has the normal flow upward.
  3. DCVAs may be installed below grade in a vault provided plugs are installed in the test cocks.
  4. Maximum height of installation shall not exceed 5 feet for device assemblies larger than 2 inches unless there is a permanently installed platform meeting Occupational Safety and Health (OSHA) standards to facilitate servicing the device.
  5. Minimum clearances for device assemblies 2 inches or smaller may be reduced provided that they are accessible for testing and repairing and the water purveyor agrees to the variance.
  6. Adequate drainage must be provided except that the drain shall not be connected to a sanitary or storm water drain. Check with local utilities for requirements.

4. Reduced Pressure Backflow Device  
(4) MINIMUM CLEARANCE FOR RPPBD INSTALLATION



- NOTE: 1. Bottom and side clearances apply when devices are installed inside building. Access doors may be provided on side of above-ground vault.
2. RPPBDs shall always be installed horizontally, never vertically.
  3. RPPBDs shall always be installed above the 100 year (1%) flood level.
  4. Relief valves shall never be extended or plugged.
  5. Protection from freezing should be provided.
  6. A provision for an air gapped drain shall be provided.
  7. RPPBDs shall not be installed in an enclosed vault or box unless a bore-sighted drain to daylight is provided.