

Country Haven MHP 41-00378

hot tubs are examples of back flow hazards requiring an RPBA.

- B. **Double Check Assembly (DCA)**- A double check valve back flow device is used for hazards which would put objectionable tastes, odors or appearance in the Park's public water supply. Ornamental fountains connected to the Park's water supply would be an example.
- C. **Pressure Vacuum Breaker (PVB)** - This device is used primarily on underground lawn irrigation systems where there are separate sprinkler zones that can be turned off while other zones are on. The zones that are off create back pressure which could re-enter the distribution system if it loses pressure. If the irrigation system is supplied with chemicals for herbicides, pesticides or fertilization, a RPBA must be used instead of a PVB.
- D. **Atmospheric (non-pressure) Vacuum Breaker (AVB)** - An atmospheric vacuum breaker is typically used for lawn irrigation systems that have no separate turn off zones and for general use garden hoses. Again, if the irrigation system uses pesticides, herbicides or fertilizers, an RPBA must be installed. If garden hoses are habitually left in hot tubs or swimming pools, the tenant must be required to install an AVB. If poison spray jars are used on the end of garden hoses, this would require an RPBA.

Be Alert To Homeowner Plumbing Work

- 4. Strictly enforce all applicable plumbing codes to ensure any privately installed plumbing modifications will not compromise the safety of the Park's water supply system. Home owners will often forget that their weekend plumbing jobs can contaminate entire sections of a water system if they do not properly install and disinfect their work and a back flow condition occurs.



Country Haven's Cross Connection Control Program

Intent

Country Haven Mobile Home Park (Park) through adoption of this document and any future amendments to it, intends to establish an active and ongoing cross connection control program for its community water system. The program is intended to identify, evaluate and protect Park's water users from actual and potential back flow hazards in compliance with Oregon State Health Division (OSHD) regulations in OAR 333-61- 070 and any applicable future revisions to those regulations.

ADMINISTRATION

Park will use as the basis for its cross connection control plan, applicable standards and methods contained in the Cross Connection Control Manual, Fifth Edition (as well as future revisions of

this manual adopted by OSHD) published by the Pacific Northwest Section of the American Water Works Association. Nothing in this plan shall prevent Park from using standards more stringent than those required by OSHD or contained in the Cross Connection Control Manual. Park will retain a certified cross connection inspector to train and supervise the activities of its staff in carrying out the duties of this program.

CROSS CONNECTION DEFINED

For the purposes of this plan, cross connection shall be defined as "Any link or channel between the piping which carries drinking water and the piping or fixtures which carry other water or other substances." (OAR 333-61-020(23)).

STANDARDS

All back flow prevention device assemblies required to be installed on premises connected to Park's system shall be of a type and model approved by OSHD.

All devices installed after December 23, 1993 shall meet the specifications of construction, evaluation and approval of back flow prevention assemblies as specified in "Section 10, Manual of Cross Connection Control, 8th Edition, June, 1988, published by the Foundation for Cross Connection Control and Hydraulics Research, University of Southern California and AWWA Standards C510-92/C511-92.

All back flow prevention device assemblies shall be installed in accordance with Sections (1) through (4) of OAR 333-61-071. Pressure vacuum breaker, double check valve and reduced pressure device assemblies shall have resilient seated gate valves or fully ported ball valves provided by the device manufacturer for both shutoff valves and for the test cocks.

ENFORCEMENT

Park has a legal obligation to protect all its water users from injury and illness caused by the back flow of undrinkable and possibly toxic substances into its water distribution system. This obligation requires a systematic inspection effort and uniform enforcement of cross connection controls and regulations for all water users.

Where a water user or any premise served by Park is found to have an actual or potential cross connection, water service shall be denied or discontinued until an appropriate back flow prevention device assembly is installed or the cause of the hazard is eliminated.

If for any reason Park cannot gain access to a premise for inspection but has reasonable cause to believe that an actual or potential cross connection is located on the user's premises, water service shall be denied or discontinued until an appropriate back flow prevention assembly is installed or

satisfactory evidence is given to Park that no cross connection hazard exists.

LOCATION

Back flow prevention device assemblies shall be installed at the service connection to premises where an approved air gap does not exist and:

1. There is an auxiliary water supply which is, or can be, connected to the potable water piping;
2. There is piping for conveying liquids other than potable water, and where that piping is under pressure and is installed in proximity to potable water piping;
3. There is intricate plumbing which makes it impractical to ascertain whether or not cross connections exist;
4. There is back siphonage potential;
5. Cross connections or potential cross connections exist

Because of the potential for back flow contamination, Park will adopt and enforce regulations requiring all water users and premise owners to notify it immediately if any water treatment devices are installed on plumbing connected to Park's water system. Water users and premise owners will also be required to notify Park of addition of any chemicals to potable water lines.

CROSS CONNECTION INSPECTION PRIORITIES

In order to provide the greatest level of cross connection protection to water users throughout Park's system, premises and activities having the likelihood of the most hazardous substances back flowing into the distribution system will be inspected first.

The following list of general categories of property uses will serve as a guideline for cross connection inspection scheduling. Park is not restricted to this schedule and can make an inspection at any individual premise it serves, regardless of use, if it has reason to believe a cross connection hazard exists.

1. Park owned and operated irrigation systems
2. Park owned and operated structures, offices, maintenance facilities
3. All off-premise water uses
4. All tenant residential premises.

CERTIFIED INSPECTOR STAFF

Park will contract with a state certified cross connection inspector to assist it in carrying out its cross connection control responsibilities in compliance with Oregon Health Division regulations.

The inspector will be available to Park on call for cross connection control activities including:

1. Cross connection control program development and implementation;
2. Making initial inspections of premises and activities according to the above schedule;
3. Special inspections of premises and activities involving back flow hazards of special and im-

mediate concern;

4. Evaluations of and decisions on the degree of back flow hazards and levels of protection required;
5. Assist in development of initial back flow device testing and re-testing requirements and schedules;
6. Advice to the owners and staff of Park concerning compliance with OSHD cross connection control regulations; methods of implementation and enforcement, record keeping and reporting.

REPORTING

Park will develop and submit an annual report on its cross connection control activities for the proceeding year. The report will be in compliance with a format provided by the Oregon State Health Division.

TENANT EDUCATION AND INFORMATION

Park will adopt and carry out an ongoing education program for its tenants and premise owners about the general hazards involved with cross connections to the community water system. The program will consist of periodic newsletters, questionnaires to tenants about the existence of a variety of cross connections, informational meetings and cross connection control information material provided to each new tenant. All tenants will be advised of the requirement to notify Park's management of any water treatment devices installed on home plumbing or of any chemicals they inject into the potable water supply.

COUNTRY HAVEN MOBILE HOME PARK

OFFICIAL WATER SYSTEM CROSS CONNECTION CONTROL REGULATIONS

DEFINITIONS

- A. "Water System" shall mean the Country Haven Mobile Home Park Water System (hereinafter called "Park") water system including wells, potable water, piping, storage and distribution facilities including all necessary appurtenances, equipment and machinery.
- B. "Back flow" shall mean a reversal of normal flow in any part of the Park's water system caused by:
 1. a negative pressure (vacuum or partial vacuum) in the supply piping; or
 2. an increase in the downstream pressure above that of the supply pressure.
- C. "Cross connection" shall mean any unprotected actual or potential connection or structural arrangement between the the Park's water system and any other water source, container, apparatus or equipment through which it is possible to introduce undrinkable fluids into any part of the water system, or any other substance other than the Park's potable water.

By-pass arrangements, jumper connections, removable sections, swivel or change over devices and other temporary or permanent devices through which or because of which back flow can or may occur are considered cross connections.

SECTION 1 - Cross Connection Control Requirements

- A. In accordance with State law and Oregon Health Division regulations, any existing or potential cross connections to the Park's community water system which are not protected by a Health Division approved back flow prevention device are prohibited. The Park shall have the right to inspect all water user premises with reasonable notice and during reasonable hours to determine the existence of cross connection conditions. If an inspection of the premises reveals such condition or if the Park has other reasonable cause to believe an unprotected actual or potential cross connection is located on a premise, the water user shall within five (5) days:
1. install an approved back flow device; or
 2. eliminate the cause of the hazard; or
 3. be disconnected from the Park's water system.
- B. The water user on the premises to which Park supplies water is required to install back flow prevention devices on the premises where:
1. there is an auxiliary water supply which is or can be connected to the potable water piping; or
 2. there is piping for conveying liquids other than potable water and where that piping is under pressure and is installed and operated in a manner which could cause a cross connection; or
 3. there is intricate plumbing which makes it impractical to ascertain whether or not cross connections exist; or
 4. there is an irrigation or underground sprinkling system connected to the potable water supply.
- C. The type of back flow prevention device required under Subsection "B" shall be commensurate with the degree of hazard that exists and meet the standards of the Oregon State Health Division on file at the Park's office.
- D. All back flow prevention devices required under these regulations shall be of a type and model approved by the Oregon State Health Division.
- E. No water user shall add any chemical or substance or install or connect any equipment, vessels, piping or other apparatus containing liquids other than potable water, to the Park's water supply without first obtaining the written permission of the Park's owner/manager

SECTION 2 - LOCATION AND METHOD OF BACK FLOW DEVICE INSTALLATION

The Park may specify the location and methods of installation of back flow prevention devices.

The control or elimination of cross connections shall be in accordance with the "Manual of Accepted Procedure and Practice in Cross connection control" published by the Pacific Northwest Section of the American Water Works Association, Fifth Edition, May, 1990. A copy of this manual is available at the Park offices for review upon request.

SECTION 3 - WATER USER TO BEAR COST OF CORRECTING CROSS CONNECTIONS

Any installation, corrective measure, disconnection or other change to a back flow prevention device shall be at the sole expense of the water user who has created or permits an actual or potential cross connection hazard to exist. The cost of any repair or correction to the Park's water system necessitated by actual or potential cross connections on the water user's premises shall be paid by the water user. Costs for cut-off, disconnection or reconnection of water service shall be paid by the water user whose actual or potential cross connection necessitated the water service action.

SECTION 4 - MOBILE AND PORTABLE APPARATUS

Any person operating any mobile or portable apparatus which uses the Park's water system or water from any water user connection must provide for back flow prevention in the same manner as required by these regulations for Park water users.

SECTION 5 - TESTING

Any testable back flow prevention device which may be required to be installed under these regulations shall be immediately tested upon installation and annually thereafter. All tests performed under these regulations must be done by a tester certified by the State of Oregon. A written report of the test results signed by the certified tester shall be submitted to the Park's manager within five (5) days of any test.

Any water user who fails to have their required back flow device tested within five (5) days following the annual anniversary date of its installation shall have their water service discontinued. The water service will not be turned back on until the Park manager receives a satisfactory report on the device's operation is received from a state certified device tester.

No device which fails a performance test by a certified tester shall be left in service without being immediately repaired or replaced and re-tested.