

**41-01053**

**RIVERBEND MHP WATER SYSTEM**

**13900 SE HIGHWAY 212**

**CLACKAMAS, OR 97015**

(Date)

*12-6-94*

**OFFICIAL CROSS CONNECTION CONTROL PROGRAM**

**INTENT**

Riverbend MHP through adoption of this document and any future amendments to it, to establish an active and ongoing cross connection control program for its community water system. The program is intended to identify, evaluate and protect Riverbend'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 revisions to those regulations.

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**ADMINISTRATION**

Riverbend will use as the basis for its cross connection control plan, applicable standards and methods contained in the Cross Connection Control Manual, Fifth Edition, published by the Pacific Northwest Section of the American Water Works Association. Nothing in this plan shall prevent Riverbend from using standards more stringent than those required by OSHD or contained in the Cross Connection Control Manual. Riverbend 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 Riverbend'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

Riverbend Mobile Home Park  
Cross Connection Control Program  
(Date)

pressure device assemblies shall have resilient seated gate valves or fully ported ball valves provided by the device manufacturer for both shut-off valves and for the test cocks.

### **ENFORCEMENT**

Riverbend 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 Riverbend is found to have an actual or potential cross connection, water service shall be immediately 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 Riverbend 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 immediately denied or discontinued until an appropriate back flow prevention assembly is installed or satisfactory evidence is given to Riverbend that no cross connection hazard exists.

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### **LOCATION**

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

There is an auxiliary water supply which is, or can be, connected to the potable water piping;

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;

There is intricate plumbing which makes it impractical to ascertain whether or not cross connections exist;

There is back siphonage potential;

Cross connections or potential cross connections exist

Because of the potential for back flow contamination, Riverbend 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 Riverbend's water system. Water users and premise owners will be required to notify Riverbend of addition of any chemicals to water lines.

Riverbend Mobile Home Park  
Cross Connection Control Program  
(Date)

### **CROSS CONNECTION INSPECTION PRIORITIES**

In order to provide the greatest level of cross connection protection to water users throughout Riverbend 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. Riverbend 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:

- Community swimming pool
- Park owned and operated irrigation systems
- Park owned and operated structures, offices, maintenance facilities
- All tenant residential premises.

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### **CERTIFIED INSPECTOR STAFF**

Riverbend 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 Riverbend on call at all regular park hours for cross connection control activities including:

- Cross connection control program development and implementation;
- Making initial inspections of premises and activities according to the above schedule;
- Re-inspections and special inspections of premises and activities involving back flow hazards of immediate concern;
- Evaluations of and decisions on the degree of back flow hazards and levels of protection required;
- Assist in development of initial back flow device testing and re-testing requirements and schedules;
- Advice to the management and staff of Riverbend concerning compliance with OSHD cross connection control regulations; methods of implementation and enforcement, record keeping and reporting.

### **REPORTING**

Riverbend 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 developed by the Oregon State Health Division.

Riverbend Mobile Home Park  
Cross Connection Control Program  
(Date)

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**TENANT EDUCATION AND INFORMATION**

Riverbend will adopt and carry out an on-going 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 sheets provided to each new tenant. All tenants will be advised of the requirement to notify Riverbend's management of any water treatment devices installed on home plumbing or of any chemicals injected into the potable water supply.

(1st Draft, DECEMBER 13, 1992)

*ADOPTED 12.6.94*

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RIVERBEND MOBILE HOME PARK

WATER SYSTEM  
CROSS CONNECTION CONTROL  
REGULATIONS

DEFINITIONS

- A. "Water System" shall mean the Riverbend Mobile Home Park (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 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 connection 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 tenant's 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 tenant's premise, the tenant 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 tenant on the premises to which the 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 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 tenant 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 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 for review upon request.

#### SECTION 3 - TENANT 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 tenant who has created or permits an actual or potential cross connection hazard to exist. The cost of any change to the Park's water system necessitated by actual or potential cross connections on the tenant's premises shall be paid by the tenant. Costs for cut-off, disconnection or reconnection of water service shall be paid by the tenant 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 tenant connection must provide for back flow prevention in the same manner as required by these regulations for park tenants.

#### 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 offices within five (5) days of any test.

Any tenant 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 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 and re-tested.