

41-01190

ATTENTION ROBERTA:
PLEASE SEE THAT THIS IS AMENDED TO OUR EXISTING ORDINANCES FOR AGATE AND ALSO APACHE WATER SYSTEMS. THANK YOU.

EFFECTIVE IMMEDIATELY AS OF FEBRUARY 1, 2000!!

NOTICE TO ALL REALTORS, BUILDERS, AND PRIVATE HOME OWNERS TRANSFERRING TITLE TO PROPERTIES WITHIN THE DESCHUTES RIVER WOODS SUB-DIVISION.

- 1. BOTH AGATE AND APACHE WATER SYSTEMS NOW REQUIRE THAT HOMES WILL BE EQUIPPED WITH STATE APPROVED BACKFLOW PREVENTERS, PRIOR TO SALE.....
- 2. ALL STATE APPROVED BACKFLOW PREVENTERS WILL BE TESTED FOR FUNCTION BEFORE WATER WILL BE CONVEYED THROUGH THEM FOR DOMESTIC USE.....
- 3. FAILURE TO COMPLY WITH THIS NEWLY ADOPTED REQUIRMENT WILL RESULT IN TERMINATION OF WATER SERVICE UNTIL FULL COMPLIANCE IS MET.....

WE HOPE THIS DOESN'T CREATE CONFUSION, HOWEVER THIS IS THE 21ST CENTURY AND WE ARE ATTEMPTING TO ESTABLISH IMPROVED STANDARDS WITHIN THE WATER SERVICE INDUSTRY.

IF YOU HAVE QUESTIONS PLEASE FEEL FREE TO CONTACT OUR BACKFLOW PROGRAM MANAGER AT 382-2855 DURING BUISNESS HOUR OF 9:00 A.M. TO 5:00 P.M. LEAVE A MESSAGE AND HE WILL RETURN YOUR CALL AS SOON AS HE IS ABLE.

APACHE WATER SYSTEM
CROSS CONNECTION ORDINANCE

Pursuant to Chapter 333, Division 61 of the Oregon Administrative Rules, it is the responsibility of Apache Water System to protect its drinking water by systematically identifying and controlling cross connections.

Now therefore, the Corporation ordains as follows:

CONTENTS

These are notes that accompany the ordinance that follows.

1:01 Definitions

Define any terms you may have used in your Ordinance that your users are not familiar with. (1) is where you need to be clear on the legal name of your water district.

1:02 PURPOSE

Why are you adopting this ordinance?

1:03 Cross Connection Regulated

1:04 Backflow Prevention Device Requirements

(4) This gives you the right to have a device installed where someone has agreed to eliminate a cross connection and then they reinstall it.

(9) Water users are asked to answer and return a questionnaire regarding certain equipment that can cause a cross connection. This assists in prioritizing inspections.

1:05 Installation Requirements and Instruction

(13) and (14) These are optional - the State says the minimum you can adopt is the OAR (333-61-70) but your program may be more stringent.

1:06 Access to Premises

Know the laws that govern your particular district and about utility right of entry!

1:07 Annual Testing and Repairs

Be Clear - Whose responsibility is this.

1:08 Variances

Remember: be willing to give the same variance to everyone!

1:09 Cost of Compliance

You Have determined this with your board - be clear!

1:10 Termination of Services

You can do this, but I do advise against threatening - be prepared to turn the water off!

1:11 Effective Date

The date your board adopts your ordinance.

Dear Water User:

In order to comply with the Oregon Administrative Rules, Apache Water has a cross connection control program. A cross connection is a physical link in a water system which would allow liquids other than drinking water to enter your water supply.

To assist in implementing this program, we ask that you fill out the attached form and return to Apache Water System within Thirty (30) days of receipt of this letter.

Enclosed is an article explaining Cross Connections. If you have any further questions, or would like more information on cross connections and the Apache Water program, please do not hesitate to call 388-9010.

Very truly yours,

APACHE WATER SYSTEM

CROSS CONNECTION

Two words, "cross connection" and "backflow" are frequently used in the water distribution field today. There are many unanswered questions regarding this issue; however, it is a proven fact that over 90% of contaminated drinking water is the end result of a backflow incident caused by a "cross connection."

What is a "cross connection?" A cross connection is any potential link between drinking water and non-drinking substances to enter the drinking water supply. A backflow device, installed correctly, can prevent this from happening.

Oregon Administrative Rules, Chapter 333-070, under Responsibilities of Water System," says: "Water suppliers are responsible for conducting an active program for systematically identifying and controlling cross connections."

Besides being required by the Health Division, having an unprotected cross connection can cause serious illness, given the right hydraulic situation. A backflow incident can be extremely costly, and could cause severe illness or death. For example, an actual recorded incident occurred a few years ago. Approximately one gallon of Chlordane, a highly toxic insecticide, backsiphoned into the water system of a residential area. Residents complained that the water looked milky, felt greasy, foamed and had a foul odor. Investigation revealed that an exterminator had left one end of a hose connected to a water tap and placed the other end in a barrel of the diluted pesticide. At the same time, water service was interrupted for repairs and, as a result, the solution was back-siphoned directly into the water main from the pesticide barrel. Extensive flushing of water mains and flushing of individual home supply lines did not sufficiently remove residual pesticides to acceptable limits. Consequently, extensive replacement of hot water heaters, water lines, and water mains was undertaken by the water supplier. Lawsuits developed from this case, resulting in \$1.4 million worth of claims against the water company. Other examples of actual or potential cross connections include hot tubs, underground sprinkler systems, auxiliary water supplies such as wells, swimming pools, solar systems, swamp collars, threaded faucets over utility sinks, boilers, or any place where a potentially harmful chemical or other substance is used in conjunction with the drinking water plumbing. Attachments at the end of a garden hose to use anti-freeze flush kits, or substances such as weedkillers or fertilizers, can result in these harmful substances being siphoned into your water supply line, if the right hydraulic conditions exist.

For water system operators, a good cross connection program includes an ordinance or bylaws provision which specifically addresses this issue. Inspections for cross-connections and suggested procedures for the installation of backflow devices should be included. A program of effective communications with your water users is essential. Let them know that you now have a program and what is expected of them. Be clear on what they need to do and what it will cost them. Stress the importance of a good program for safety reasons, for their health and the health of their families. Be consistent. Do not make an exception for one that you aren't willing to make for all.

APACHE WATER SYSTEM

CROSS CONNECTION REGULATIONS

Pursuant to Chapter 333, Division 61 of the Oregon Administrative Rules, it is the responsibility of Apache Water to protect its drinking water by instituting an enforcing a cross connection program. Therefore, the following regulations are hereby adopted:

CONTENTS:

1:01	Definitions
1:02	Purpose
1:03	Cross Connections Regulated
1:04	Backflow Prevention Device Requirements
1:05	Installation Requirements & Instructions
1:06	Access to Premises
1:07	Annual Testing and Repairs
1:08	Variances
1:09	Cost of Compliance
1:10	Termination of Services
1:11	Effective Date

1:01 DEFINITIONS

(1) "APACHE WATER" means Apache Water System.

(2) "Cross Connection" means any physical arrangement where a public water system is connected, directly or indirectly, with any other non-drinkable 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 change over devices, or other temporary or permanent devices through which, or because of which, backflow may occur are considered to be cross connections.

CROSS CONNECTION REGULATIONS

1:04 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 certified cross connection inspector employed by Apache Water in each of the following circumstances:

- (1) If the nature and extent of any activity of the premises, or the materials used in connection with any activity of the premises, or materials stored on the premises, could contaminate or pollute the drinking water supply.
- (2) On premises having any one or more cross connections as that term is defined in section 1:01 paragraph 2.
- (3) Internal cross connections that are not correctable, or intricate plumbing arrangements which make it impractical to ascertain whether or not cross connections exist.
- (4) A repeated history of cross connections being established or re-established.
- (5) Unduly restricted entry so that inspections for cross connections cannot be made with sufficient frequency or with sufficient notice to assure that cross connections do not exist.
- (6) Materials of a toxic or hazardous nature being used such that, if back siphonage should occur, a health hazard could result.
- (7) Any mobile apparatus which uses Apache Water system or water from any premises within the Apache system.
- (8) On any premise where installation of an approved backflow prevention device is deemed to be necessary to accomplish the purpose of these regulations in the judgement of a certified cross connection specialist employed by Apache Water.
- (9) On any premise where an appropriate cross connection report form has not been filed with the office of Apache Water.

CROSS CONNECTION REGULATIONS

(3) "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 system of Apache Water.

(4) "Auxiliary supply" means any water source or system other than the public system, that may be available in the building or on the premises.

(5) "Approved backflow prevention device" means a device to counteract back pressures or prevent back siphonage. This device must appear on the list of approved devices issued by the Oregon State Health Division.

(6) "Reduced pressure principle device" shall mean an assembly 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 shut off valves at the end of the assembly. A check valve is approved if it appears on the list of approved devices issued by the Oregon State Health Division.

(7) "Premises" means any piece of land to which water is provided including all structures, improvements, mobile home(s) and structure located on it.

1:02 PURPOSE

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

1:03 CROSS CONNECTIONS REGULATED

No cross connections shall be created, installed, used or maintained within the territory served by Apache Water, except in accordance with these regulations.

CROSS CONNECTION REGULATIONS

1:05 INSTALLATION REQUIREMENTS

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

- (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 provided.
- (2) 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 Apache Water prior to installations.
- (3) The device must be protected from freezing and other severe weather conditions.
- (4) All backflow device prevention assemblies shall be of a type and model approved by the State of Oregon Health Division and Apache Water Cross Connection Inspector.
- (5) Only devices specifically approved by the Oregon Health Division for vertical installation may be installed vertically.
- (6) The device shall be readily accessible with adequate room for maintenance and testing. Devices 2" and smaller shall have at least 6" clearance on all sides of the device. All Devices larger than 2" shall have a minimum clearance of 12" on the back side, 24" on the test cock side, 12" below the device and 36" above the device.
- (7) The property owner assumes all responsibility for all maintenance and annual testing of the device.
- (8) If written permission is granted to install the backflow device inside of the building, the device shall be readily accessible during regular working hours of 8:00 a.m. to 5:00 p.m., Monday through Friday.
- (9) If a device, with written permission, is installed inside of the premises and is 4" or larger and is installed 4' above the floor, it must be equipped with a rigidly and permanently installed scaffolding acceptable to Apache Water. This installation must also meet the requirements set out by the U. S. Occupational Safety and Health Administration and The State of Oregon Occupational Safety and Health Codes.

CROSS CONNECTION REGULATIONS

- (10) RP 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.
- (11) 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 in no case less than 1".
- (12) Upon completion of installation, Apache Water shall be notified and all devices must be inspected and tested. All backflow devices must be registered with Apache Water. Registration shall consist of date of installation, make model, serial number of the backflow device, and initial test report.
- (13) An air gap is not an approved means of cross connection protection in the WATER System.
- (14) All new construction shall install an approved backflow device at the service connection.

1:06 ACCESS TO PREMISES

Authorized employees of Apache Water, with proper identification, shall have access during reasonable hours to all parts of a premise and within the building 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 on reasonable notice for inspection by a cross connection specialist appointed by Apache Water, a reduced pressure principle device will be required to be installed at the service connection to that premise.

1:07 ANNUAL TESTING AND REPAIRS

All backflow devices installed within the territory served by Apache Water shall be tested immediately upon installation and annually thereafter by a state certified tester. All such devices found not functioning properly shall be promptly repaired or replaced by the water user. If any such device is not promptly repaired or replaced, Apache Water may deny or discontinue water to the premise. All testing and repairs are the financial responsibility of the water user.

CROSS CONNECTION REGULATIONS

1:08 VARIANCES

Any variances from these requirements shall be requested in writing by the owner and approved by Apache Water prior to device installation.

1:09 COSTS OF COMPLIANCE

All costs associated with purchase, installation, inspections, testing, replacement, maintenance, part, and repairs of the backflow device are the financial responsibility of the water user.

1:10 TERMINATION OF SERVICE

Failure on the part of any customer to discontinue the use of all cross connections and to physically separate cross connections is sufficient cause for the immediate discontinuance of public water service to the premises. (OAR chapter 333-061-070, section 1)

1:11 EFFECTIVE DATE

These regulations shall be effective as of April 1, 1994.

If you have any questions, please call Mary Howell or Beverly Clement at (503) 231-6078.

CROSS CONNECTION REPORT FORM

1. Are you renting or buying?

If renting, please provide name and address of owner.

Do you have any of the following?

Swamp cooler	yes	no
Hot tub	yes	no
Swimming pool	yes	no
Jacuzzi	yes	no
Underground sprinkler system	yes	no
Drip irrigation system	yes	no
Green house	yes	no
Solar system	yes	no
Utility sink (with threaded faucet)	yes	no
Fire sprinkler system	yes	no
Ghost pipes	yes	no

3. Do you use:

Antifreeze flush kits	yes	no
Insecticide sprayers (that attach to garden hose)	yes	no
Dark room equipment	yes	no

4. Do you or anyone in this home use a portable dialysis machine?

5. Do you have a bathtub that fills from the bottom: or does not have an overflow drain & is not airgapped?

6. Do you have an auxiliary water supply on your premise?

7. Do you receive irrigation water from a different source?

8. Do you have livestock (i.e. horses, cows, etc.)?

9. Does a creek or river run through your property?

10. Do you have a backflow preventor on your property at this time?

Please notify Apache Water if any of the above conditions ever change on your property.

Signature of Water Client

Print your name

Mailing address _____

Physical Address _____
(of property) _____

Please answer all the above questions and return by: _____

Return to: Apache Water System
22165 Bear Creek Road
Bend, Oregon 97702