

## **Ocoee Utility District**

### **Cross-Connection Control Program**

#### **I. Purpose**

A. To protect the public potable water supply served by the Ocoee Utility District from the possibility of contamination or pollution by isolating, within its customers internal distribution system, such contaminants or pollutants which could backflow or back-siphon into the public water system.

B. To promote the elimination or control of existing cross-connections, actual or potential, between its customers in-plant potable water system, and non-potable systems.

C. To provide for the maintenance of a continuing program of cross-connection control which will effectively prevent the contamination or pollution of all potable water systems by cross-connection.

#### **II. Authority**

A. The Federal Safe Drinking Water Act of 1974, and the statues of the State of Tennessee Sections 68-221-701 through 68-221-720 the water purveyor has the primary responsibility for preventing water from unapproved sources, or any other substances, from entering the public potable water system.

B. Ocoee Utility District, Rules and Regulations, adopted.

#### **III. Responsibility**

The Manager shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or back-siphonage of contaminates or pollutants through the water service connection. If, in the judgment of the Manager, an approved backflow device is required at the Districts water service connection to any customers premises, the Manager, or his delegated agent, shall give notice in writing to said customer to install an approved backflow prevention device at each service connection to his premises. The customer shall, within 90 days install such approved device, or devices, at his own expense, and failure or refusal, or inability on the part of the customer to install said device or devices within ninety (90) days, shall constitute a ground for discontinuing water service to the premises until such device or devices have been properly installed.

## **IV. Definitions**

### **A. Approved**

Accepted by the Manager as meeting an applicable specification stated or cited in this regulation, or as suitable for the proposed use.

### **B. Auxiliary Water Supply**

Any water supply, on or available, to the premises other than the purveyor's approved public potable water supply.

### **C. Backflow**

The flow of water or other liquids, mixtures or substances, under positive or reduced pressure in the distribution pipes of a potable water supply from any source other than its intended source.

### **D. Backflow Preventer**

A device or means designed to prevent backflow or back-siphonage. Most commonly categorized as air gap, reduced pressure principle device, double check valve assembly, pressure vacuum breaker, atmospheric vacuum breaker, hose bibb vacuum breaker, residential dual check.

### **E. Backpressure**

A condition in which the owners system pressure is greater than the suppliers system pressure.

### **F. Back-siphonage**

The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.

### **G. Containment**

A method of backflow prevention which requires a backflow prevention preventer at the water service entrance.

#### H. Contaminant

A substance that will impair the quality of water to a degree that it creates a serious health hazard to the public leading to poisoning or the spread of disease.

#### I. Cross-connection

Any actual or potential connection between the public water supply and a source of contamination or pollution.

#### J. Fixture Isolation

A method of backflow prevention in which a backflow preventer is located to correct a cross-connection at an in-plant location rather than at a water service entrance.

#### K. Owner

Any person who has legal title to, or license to operate or habitate in, a property upon which a cross-connection inspection is to be made or upon which a cross-connection is present.

#### L. Person

Any individual, partnership, company, public or private corporation, political subdivision or agency of the State Department, agency or instrumentality of the United States or any other legal entity.

#### M. Pollutant

A foreign substance, that if permitted to get into the public water system, will degrade its quality so as to constitute a moderate hazard, or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but does adversely and unreasonably effect such water for domestic use.

#### N. Water Service Entrance

That point in the owners water system beyond the sanitary control of the District; generally considered to be the outlet end of the water meter and always before any unprotected branch.

#### O. Manager

The person in charge of the operation of the Ocoee Utility District Public Water System or the authorized representative of that person.

## **V. Administration**

A. The Department will operate a cross-connection control program, to include the keeping of necessary records, which fulfills the requirements of the Commission's Cross-Connection Regulations and is approved by the Commission.

B. The Owner shall allow his property to be inspected for possible cross-connections and shall follow the provisions of the Departments program and the Commissions Regulations if a cross-connection is permitted.

C. If the Department requires that the public supply be protected by contamination, the Owner shall be responsible for water quality beyond the outlet end of the containment device and should utilize fixture outlet protection for that purpose.

He may utilize public health officials, or personnel from the District or their delegated representatives, to assist him in the survey of his facilities and to assist him in the selection of proper fixture outlet devices, and the proper installation of these devices.

## **VI. Requirements**

### **A. District**

1. On new installations, the District will provide on-site evaluation an/or inspection of plans in order to determine the type of backflow preventer, if any, that will be required, and perform inspection and testing.

2. For premises existing prior to the start of this program, the District will perform evaluations and inspections of plans and/or premises and inform the owner by letter of any corrective action deemed necessary, the method of achieving the correction, and the time allowed for the correction to be made. Ordinarily, ninety (90) days will be allowed, however, this time period may be shortened depending upon the degree of hazard involved and the history of the device(s) in question.

3. The District will not allow any cross-connection to remain unless it is protected by an approved backflow preventer and which will be regularly tested to insure satisfactory operation.

4. The District shall inform the Owner by letter, of any failure to comply, by the time of the first re-inspection. The District will allow an additional fifteen (15) days for the correction. In the event the Owner fails to comply with the necessary correction by the time of the second re-inspection, the District will inform the Owner by letter, that the water service to the Owner's premises will be terminated within a period not to exceed five (5) days.

5. If the District determines at any time that a serious threat to the public health exists, the water service will be terminated immediately.

6. District personnel certified by the State of Tennessee as backflow prevention specialists shall conduct all testing of the devices. However, upon approval by the District the customer may employ a third party agent to test the device. The District shall have on file, a list of Private Contractors who are certified backflow device testers. All charges for these tests will be paid by the Owner of the building or property.

#### B. Owner

1. The Owner shall be responsible for the elimination or protection of all cross-connections on his premise.

2. The Owner, after having been informed by a letter from the District, shall at his expense, install, maintain, and test, or have tested, any and all backflow preventers on his premises.

3. The Owner shall correct any malfunction of the backflow preventer revealed by periodic testing.

4. The Owner shall inform the District of any proposed or modified cross-connections and also any existing cross-connections of which the Owner is aware but has not been found by the District.

5. The Owner shall not install a by-pass around any backflow preventer unless there is a backflow preventer of the same type on the bypass. Owners who cannot shut down operation for testing of the device(s) must supply additional devices necessary to allow testing to take place.

6. The owner shall install backflow preventers in a manner approved by the District. Backflow prevention devices installed after 05/20/09 shall be installed within ten (10) feet of the water meter assembly and in a manner consistent with the manufacturers recommended installation procedures.

7. The Owner shall install only backflow preventers approved by the District or the Commission.

8. The Owner shall be responsible for the payment of all fees for testing, re-testing in the case that the device fails to operate correctly, and second re-inspections for non-compliance with District or Commission requirements.

## **VII. Degree of Hazard**

The District recognizes the threat to the public water system arising from cross-connections. All threats will be classified by degree of hazard and will require the installation of approved reduced pressure principle backflow prevention devices or double check valves.

Examples of uses that require a testable, reduced pressure double check valve assembly:

1. Commercial installations,
2. Agricultural installations,
3. Installations providing water to irrigation systems,
4. Installations providing water to commercial or public pools or similar bodies,
5. Installations providing water to any hard plumbed or device controlled supply to pools or recreation use water application, including residential applications,
6. Industrial/mining applications,
7. Any installation with alternate sources of water.

Exemptions:

Commercial installations that upon inspection meet the following requirements:

1. Are a single unit ( building ),
2. Plumbing use is domestic only – i.e. single bathroom facilities for employees, kitchen sink or other domestic type use that is not used as part of the process or service that the facility produces. Model or type of existing appurtenances may prohibit this exemption.
3. Upon determination that a backflow device is not needed, the District will continue inspections at least once annually. Changes made to the plumbing system must be declared to the District within 30 days of the initiation of service of the new plumbing. If it is determined that changes sufficient to require the installation of a device have been made, the customer has 30 days to comply with the change in designation.

## **VIII. Existing in-use backflow prevention devices.**

Any existing backflow preventer shall be allowed by the District to continue in service unless the degree of hazard is such as to supersede the effectiveness of the present backflow preventer, or result in an unreasonable risk to the public health. Where the degree of hazard has increased, as in the case of a residential installation converting to a business establishment, any existing backflow preventer must be upgraded to a reduced pressure principle device, or a reduced pressure principle device must be installed in the event that no backflow was present. Otherwise any existing device that is not a reduced

pressure principle device must be replaced with a reduced pressure principle device upon failure when tested.

## **IX. Periodic Testing**

A. Reduced pressure principle backflow devices shall be tested and inspected annually. Any other devices allowed to remain in use must be testable and the District must be given access to the device on the annual schedule determined by the District.

B. Periodic testing shall be performed by the District's certified tester or his delegated representative. This testing will be done at the owner's expense.

C. The testing shall be conducted during the District's regular business hours. Exceptions to this, when at the request of the owner, may require additional charges to cover the increased costs to the District.

D. Any backflow preventer which fails during a periodic test will be repaired or replaced. When repairs are necessary, upon completion of the repair the device will be re-tested at owner's expense to insure correct operation. High hazard situations will not be allowed to continue unprotected if the device fails the test and cannot be repaired immediately. In other situations, a compliance date of not more than thirty (30) days after the test will be established. The owner is responsible for spare parts, repair tools, or a replacement device. Parallel installation of two (2) devices is an effective means of the owner insuring that uninterrupted water service during testing or repair and is strongly recommended when the owner desires such continuity.

E. Customers who are not required to install a reduced pressure principle device may fall into a hazard category that requires an annual or lesser interval inspection by District personnel. Such categorized customers include pool owners, commercial customers, agricultural customers, and any customer site that may have had a change in the nature of the service.

## **X. Fees and Charges**

The District will publish a list of fees or charges for the following services:

1. Testing fees - \$75.00 per device ( billed monthly @ \$6.25 )
2. Re-testing fees - \$100.00 per device
3. Fee for re-inspection - \$25.00 per device
4. Charges for after-hours inspections or tests - additional \$50.00 per hour plus management approval

