SAMPLE CROSS-CONNECTION CONTROL PROGRAM For Small Systems

Introduction

This Policy addresses Article 12 of the <u>Colorado Primary Drinking Water Regulations</u> that states a public water system shall have no uncontrolled cross-connections to a pipe, fixture, or supply, any of which contain water not meeting provisions of the drinking water regulations.

A cross-connection is any point in a water distribution system where chemical, biological, or radiological contaminants may come into contact with potable water. During a backflow event, these contaminants can be drawn or pushed back into the potable water system. A backflow prevention device installed at every point of cross-connection prevents contaminated water from entering the potable water distribution system.

Any hazardous cross-connection discovered to be uncontrolled will be corrected within 10 days or the water service will shut off. The Colorado Department of Public Health and Environment will be informed of the hazardous connection and the corrective action being taken.

Identification of Potential Cross-Connections

Per Article 12, the (add your name: (i.e. town's/municipality's/public water system's/district's) operator performed a survey of the public water system on (This Date) and identified a list of potentially hazardous cross-connections, prioritized by degree of hazard. This list is included on an attached sheet. From this date forward, any new water service installation will be inspected for compliance with these requirements for backflow prevention.

Public Education

The (add your name: (i.e. town/municipality/public water system/district) will educate system users about the potential health risk that cross-connections pose, with an emphasis on cross-connections at or within homes and other residences.

Installation of Devices

The (add your name: (i.e. town/municipality's/public water system's/district's) will require system users to install and maintain backflow prevention devices on potentially hazardous service connections, as stated in Article 12. All service connections within the water system must comply with Article 12 and the *Colorado Cross-Connection Control Manual*.

Each cross-connection may require a different type of backflow prevention device, commensurate with the degree of hazard posed by the cross-connection. Approval for the devices needs to be given by the water system operator or, water system engineer.

Annual Testing

Article 12 requires that backflow prevention devices be tested annually by a certified backflow prevention technician. The following is a list of certified technicians in our area, their certification numbers, and contact information:

(provide list)

Record Keeping

Testing and maintenance records will be kept for three years, per the requirements of Article 12.

List of Backflow Prevention Devices

The following approved devices can be used for backflow prevention:

- Vacuum breaker
- Double-check valve assembly
- Reduced pressure principal backflow assembly
- Air gap

The Colorado Department of Public Health and Environment accepts the use of backflow preventers that have received approval by either University of Southern California Foundation of Cross-Connection Control and Hydraulic Research or the American Society of Sanitary Engineers (ASSE).

The following is a list of common cross-connections and devices that may be used to prevent backflow:

Type of Cross-Connection	Backflow Prevention Device
Hose bib	Vacuum breaker
Fire sprinkler system; Solar house using potable water as heat source	Double check valve assembly on water only line. Approved reduced pressure principal backflow assembly on branch lines carrying chemicals.
Photographic processors and developers	Reduced pressure principal backflow assembly
Hot water boilers	Reduced pressure principal backflow assembly
Water hauler tank filling station	Air gap

Additional resource:

Colorado Cross-Connection Control Manual; Corporate Discount Books, (303)465-0465

POTENTIAL CROSS-CONNECTIONS SAMPLE LIST

"The water supplier must conduct a systematic survey of all facilities connected to the water distribution system before backflow prevention assemblies can be required at the service-connections. The survey can then be used to determine the degree of hazard posed by each facility connected to the water distribution system.

"Information in this manual, combined with interviews with facility managers, will help the water supplier to determine the degrees of hazard. Facilities presenting health hazards to the water distribution system will require containment assemblies. Those cross-connections viewed as the most severe hazards will have the highest action priority for correction."

Date:

Source: Colorado Cross-Connection Control Manual, March 2000, pages 11-12

System Survey Conducted By:

Residential hose bibbs

Street Address of	Degree of Hazard:
Potential	Contamination or health hazard = High ,
Cross-Connection	Pollution hazard = Low
	Potential