



## **Proclamation Statement for a Backflow Emergency Response Plan**

### **What is Backflow Emergency Response?**

Backflow Emergency Response protocols parallel guidelines for emergency response to catastrophic natural disasters or chemical spills affecting the public water system. However, unlike the EPA HAZMAT or Civil Authority response protocols, it is the Water Purveyor who is charged by necessity and knowledge with the responsibility of isolating and correcting a public water system health hazard due to a backflow event in the least amount of time. Emergency response for backflow is far different from EPA HAZMAT or natural disaster emergency response protocols. Hazmat responds to spills of known, identifiable products and/or conditions allowing analysis of potential impact to public health. Natural disasters resulting in a loss of the public water system address biological contamination probability and potable water source replenishment only. Bacterial contamination is resolved through treatment, boil water notices, and flushing. The necessity of a Backflow Emergency Response becomes predominantly apparent after the fact. It is through discovery, because of illness & treatment or enlightened recognition of undesirable water quality, odor, color, clarity or taste, due to a backflow or injection event, that a contaminant has been introduced into the public water system. Boil Water Notices simply do not apply to a chemically contaminated public water system. Immediate/timely response, isolation, notification, flushing and testing are the only effective responses to protect the public from a contaminated public water system.

### **Authorization for a Backflow Emergency Response Plan**

#### ***Colorado Primary Drinking Water Regulations Article 12 – Hazardous Cross Connections***

Sub paragraph 12.2.2 provides for protection of the public water system by

- (1) *Placing responsibility of identifying potential hazardous service connections upon the supplier of water, and*
- (2) *“Require system users to install and maintain containment devices on health hazard service connection,” etc.*

This would constitute a containment program, i.e., protection of the PWS at the service connection. *This in itself qualifies the need for emergency response should protection of the service connection not exist if the service connection backflow prevention assembly fails.*

**Colorado House Bill 99-1145** “*authorizes any local government with an inspection and permitting program to adopt a plumbing code incorporating standards that have been adopted as part of a nationally recognized model plumbing code.*”

### ***The International Plumbing Code***

Section 608.1 establishes the requirement for protection of the public water system at the service connection and is quoted here for clarity.

*“608.1 General. A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from non-potable liquids, solids or gases being introduced into the potable water supply through cross connections or any other piping connection to the system. Backflow preventer applications shall conform to Table 608.2, except as specifically stated in Sections 608.2 through 608.16.9.”*

The *International Association of Plumbing and Mechanical Officials - Uniform Plumbing Code* Chapter 6 - Water Supply & Distribution Sub paragraph 602 Unlawful Connections and Sub paragraph 603 Cross Connection Control defines the limitations and requirements for backflow prevention. *Keep in mind the “Administrative Authority” as used in the plumbing code is generally the Building/Plumbing Department. However, Article 12 of Colorado Primary Drinking Water Regulations provides for parallel responsibility and enforcement by the supplier of water.*

The *Colorado Cross Connection Control Manual*, 5<sup>th</sup> edition, published by the Colorado Department of Public Health and Environment Water Quality Control Division and the Colorado Cross-Connection Control Advisory Committee

The introduction substantiates the above-mentioned comments. Section 14 of the manual qualifies the need for an emergency response program. *A prudent purveyor of a public water system should as a course of responsibility, be prepared to address emergency response to chemical contamination of a public water distribution system. The Colorado CCC Manual does not address this issue. Neither does the AWWA M19 Manual of Emergency Planning for Water Utility Management, FEMA Guide for All Hazard Emergency Operations Planning or EPA Regulations (Except for source protection).*

### **Justification for an Emergency Response Plan**

1. The reference states codes and adopted publications place the burden of responsibility upon the supplier of water to protect the public from a health hazard due to backflow or back-siphonage. Specifically, the Colorado Primary Drinking Water Regulations, Article 12, mandate emergency response due to failure or non-existence of a backflow prevention assembly at the service connection required for the protection of the public water system.
2. Without the capability to respond to an emergency involving chemical contamination of the public water distribution system, the supplier of water is violating a public trust; and as such, the supplier of water is subject to litigation and damages. Refer to the “White Paper” by Lou Allyn Byus of the Illinois EPA opinion on this and related subjects.
3. Emergency Response is ALWAYS AFTER THE FACT. All of the referenced material herein and though out the water industry, is based upon prevention of backflow, NOT to emergency response to an actual event. Remember, *“The prudent purveyor of a public water system should as a course of responsibility, be prepared to address the chemical contamination of a public water system.*

**Information provided by SPB Utility Services, Inc. (800) 706-6531 and the Colorado Backflow Prevention Association.**