

BEFORE THE  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL QUALITY COUNCIL  
STATE OF WYOMING

Carmen  
APR 22 2003

MATTER OF CHAPTER 12, )  
SECTION 14, DISTRIBUTION SYSTEMS )  
SUBSECTION (i), CROSS CONNECTIONS )  
WYOMING WATER QUALITY )  
DIVISION RULES AND REGULATIONS )

STATEMENT OF PRINCIPAL REASONS

Background

On November 30, 1998 the Water Quality Division received a petition for rule making from the City of Torrington to revise the requirements for residential check valves as required by Chapter 12, Section 14 (i). On January 16, 1999, the Water Quality Division received a second petition for rule making from the Cheyenne Board of Public Utilities to revise the requirements for residential check valves as required by Chapter 12, Section 14 (i). The Water Quality Division administrator accepted the requests for rule making and initiated rule making to revise the subsection of Chapter 12, Design and Construction Standards for Public Water Supplies, applicable to cross connections.

The Proposed Rule

The basic requirement of the existing regulation, which was adopted May 24, 1985, has not changed. That requirement states "*There shall be no connection installed or maintained between a public water supply and any water user whereby unsafe water or contamination may backflow into the public water supply.*" The rule change was needed to effectively implement the basic requirement of preventing backflow of unsafe or potentially unsafe water to the public water supply. High hazard backflows have occurred within water user's systems. Hazard classification surveys of high and low hazard water user's systems have discovered improperly applied, installed and maintained backflow prevention devices. The rule has been updated to take advantage of lessons learned about cross connection control in the last 20 years. The petitions raised two issues: 1) a check valve is not a reliable backflow prevention device; and 2) backflow prevention at a residential or domestic service connection can cause serious problems for the water user as the result of excessive system pressures generated by the thermal expansion of cold water being heated in the hot water heater. The requirement for residential check valves was removed. The requirement for the use of dual check valves for residential services was added. A process was recommended by the cross connection control work group to allow the elimination of dual checks at the service connection by providing point of use isolation within residences or domestic services. Allowing elimination of the dual check would prevent problems that the residential users may encounter with thermal expansion from the hot water heater causing the hot water heater relief valve to open frequently or causing flexible hoses to washing machines and dishwashers to fail. After evaluation of the risks associated with depending on point of use isolation for protection of the public water distribution system, the Water and Waste Advisory Board recommended universal cross connection control at the service connection. A statement has been added requiring annual testing and maintenance of backflow prevention devices



installed at high hazard non-residential service connections. A reporting requirement for high hazard backflow incidents was added. The Advisory Board recommended that changes of requirements for backflow devices at residential connections not be retroactive. The changes to the existing rule made by the proposed rule only applies to residential service connections made after adoption of these rules.

### **Rulemaking process**

The rule making process began with the solicitation of public input. The public input was gathered by a state wide video conference August 24, 1999. A statewide mailing to all licensed water system operators and to all municipalities with an attached questionnaire was made to advertise the video conference. Public notice was provided by articles in newsletters published by the WWQ-PCA and Wyoming Association of Municipalities. The attendees of the video conference recommended that a diversified workgroup be developed to prepare recommendations for changes to the Chapter 12 regulations pertaining to cross connection control. The final meeting of the workgroup was held September 25, 2000. After receiving recommendations for additional corrections and additions from the workgroup, the proposed rules were submitted to the Water Quality Division administrator. The administrator directed that language be added to the working documents strengthening the requirements for testing and maintenance of installed backflow prevention devices. The proposed rules were submitted to the Water and Waste Advisory Board April 23, 2002, July 17, 2002, and October 1, 2002. The Water and Waste Advisory Board on October 1, 2002 recommended to the Administrator that Chapter 12 with the modified rules pertaining to cross connections be recommended to the Director of Environmental Quality and the Environmental Quality Council for adoption.

### **Compliance with Federal Law and Regulation**

This revision of rules is not required by federal law or regulations.

### **Conclusion**

The Council has determined that the adoption of this revised chapter of rules is necessary to implement the requirements of W.S. 35-11-301 (a) (v) and W.S. 35-11-302 (a) (iii), to provide improved protection to public health and the safety for public water supplies.

EXECUTED THIS 17<sup>th</sup> DAY OF January, 2003.

FOR THE ENVIRONMENTAL QUALITY COUNCIL



Chairperson