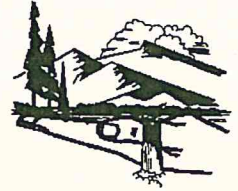




# Department of Environmental Quality

*To protect, conserve, and enhance the quality of Wyoming's environment for the benefit of current and future generations.*



Matthew H. Mead, Governor

152 N. Durbin St., Suite 100 · Casper, WY 82601 · (307) 473-3450

Todd Parfitt, Director

August 31, 2016

To: All Wyoming Public Water Systems:

This letter is provided to give clarification to the requirement for back-flow prevention devices on existing service lines that ARE connected or WILL BE connected to a Public Water System.

Chapter 12, Section 14(i)(i) of the Wyoming Department of Environmental Quality's Rules and Regulations state the following:

*"There shall be no water service 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."*

Further, Chapter 12, Section 14(i)(i)(A) states that:

*"Applicability. In order to protect all public water supplies from the possibility of the introduction of contamination due to cross connections, the water supplier shall require backflow prevention devices for each water service connection in accordance with Table 1 which appears at the end of this section, with the exception of (B)(I) residential water service connections and (B)(II) domestic non-residential water service connections. The water supplier shall take appropriate actions which may include immediate disconnection for any water user that fails to maintain a properly installed backflow prevention device or comply with other measures as identified in Section 14(i) of these regulations."*

**Please note that there is no "grandfathered" clause included at all in this Chapter.** All connections to a public water supply system must be analyzed and a hazard classification made. Based upon this classification, the appropriate protection devices must be installed (Residential service lines and domestic non-residential service connections are typically not required to have a backflow prevention device, although they may have secondary connections that would require them to have a BFPD, such as an irrigation system or an auxiliary water supply). It is recommended that you read the entire section on Cross-Connections (Chapter 12, Section 14(i)) if you would like further information on the type of backflow prevention devices required for various situations.

If you have any further questions, please contact myself at 307-473-3478 or Rich Cripe, Water and Wastewater Program Manager, at 307-777-7075.

Sincerely,

Karen L. Farley, P.E.  
WDEQ/WQD Northeast District Supervisor  
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**TABLE 1**  
**Backflow Prevention Devices, Assemblies and Methods**

Device, Assembly or Method	Degree of Hazard				Notes
	Low Hazard		High Hazard		
	Back-Siphonage	Back-Pressure	Back-Siphonage	Back-Pressure	
Airgap	X		X		See Note 1
Atmospheric Vacuum Breaker	X		X		Not allowed under continuous pressure
Spill-proof Pressure-type Vacuum	X		X		
Double Check Valve Backflow Preventer	X	X			
Pressure Vacuum Breaker	X		X		
Reduced Pressure Principle Backflow	X	X	X	X	See Note 2
Dual Check	X				Restricted to residential services

Note 1 Minimum Airgap for Water Distribution. For spouts with an effective opening diameter of one-half inch or less, the minimum airgap when the discharge is not affected by side walls shall be one inch. The minimum airgap when the discharge is affected by sidewalls shall be one and one-half inches. For effective openings greater than one-half inch, the minimum airgap shall be two times the effective opening diameter when the discharge is not affected by side walls. The minimum airgap when the discharge is affected by sidewalls shall be three times the effective opening diameter.

Note 2 Extreme Hazards. In the case of any water user's system where, in the opinion of the water supplier or the administrator, an undue health threat is posed because of the presence of extremely toxic substances or potential back pressures in excess of the design working pressure of the device, the water supplier may require an air gap at the water service connection to protect the public water system.