

Water Industry Backflow Prevention Methods (3016)

Course Description

Backflow is an undesirable flow condition caused by a differential pressure that causes the flow of water and other substances into the distribution pipes of a potable water supply system. This can result in contamination of the potable water supply. Backflow contamination can occur if there are existing cross-connections, backsiphonage or backpressure conditions, and unprotected cross-connection or failure of protection devices. Elimination of cross-connections and prevention of backflow is essential to maintaining the safety and health of the water supply. This course highlights the methods of backflow prevention and describes seven commonly used backflow prevention devices. This training course has 14 learning modules with a 10-question exam.

Course Objectives

After successfully completing this course, you will be able to:

- List and explain three methods for backflow prevention.
- List seven types of backflow prevention devices and for each type
 - Identify its schematic.
 - Explain its operation.
 - List its advantages and disadvantages.
 - Describe its application(s).

Agenda

- Introduction – 2 minutes
- Eliminating Cross Connections – 5 minutes
- Maintaining Minimum System Pressure – 5 minutes
- Applying Backflow Prevention Devices – 5 minutes
- Identification of Hazard Types – 5 minutes
- Types of Backflow Prevention Devices – 5 minutes
- Air Gaps – 5 minutes
- Barometric Loops – 4 minutes
- Vacuum Breakers – 3 minutes
- Double Check Valve Assemblies – 4 minutes
- Residential Dual Check Valve – 3 minutes
- Atmospheric Vacuum Breaker – 3 minutes
- Pressure Vacuum Breaker – 3 minutes
- Hose-Bibb Vacuum Breaker – 3 minutes
- Testing and Maintenance of Backflow Prevention Devices – 3 minutes
- Summary – 2 minutes