

Town of Essex, MA

CROSS CONNECTION CONTROL PROGRAM (CCCP)

BACKFLOW PREVENTION FAQ

Why does the Town of Essex have a Backflow Prevention and Cross Connection Control Program (CCCP)?

The Town of Essex Water Department wants to ensure that our water distribution system remains safe from harmful substances based on regulations set forth by the Massachusetts Department of Environmental Protection Agency (MassDEP) under 310 CMR 22.22.

What is a cross-connection?

A cross-connection is any temporary or permanent connection between a public water system (i.e., drinking water system) and any source or system containing non-potable water or other substances. Potable water is water that is suitable for drinking. Cross-connections are the links through which it is possible for contaminating materials to enter a potable water supply (i.e., piping between a public water system and an auxiliary water system, cooling system, well, or irrigation system). Cross connections or backflow happens when the pressure of the polluted source exceeds the pressure of the potable source.

What is backflow?

Backflow is the undesirable reversal of the flow of non-potable water or other substances through a cross connection and into the piping of a public water system.

Why do water system operators need to control backflow?

Backflow into a public water system can pollute or contaminate the water in that system (i.e., backflow into a public water system can make the water in that system unusable or unsafe to drink), and each water supplier has a responsibility to provide water that is safe to drink under all foreseeable circumstances. Furthermore, consumers generally have absolute faith that water delivered to them through a public water system is always safe to drink. For these reasons, each water supplier must take reasonable precautions to protect its public water system against backflow.

If I have a cross connection, how often does the connection itself get tested?

The connection gets tested yearly by the Town of Essex Water Depart according to the schedule set by the Department of Environmental Protection Regulation 310 CMR 22.22.

Why are irrigation systems considered to be hazardous to the water system?

Irrigation systems include but are not limited to agricultural, residential, and commercial applications. Lawn sprinkler systems and irrigation systems are often classified as a high hazard for several reasons. Sprinklers, bubbler outlets, emitters, and other equipment are exposed to substances such as fertilizers, fecal material from pets or other animals, pesticides, and other chemical and biological contaminants. Sprinklers may remain submerged under water after use or storms. Should the water system pressure suddenly decrease, such as in the case of a water main break, line flushing, or during a major fire involving multiple fire hydrants, these harmful substances can be back-siphoned into the water distribution system. They may be subject to various onsite conditions such as additional water supplies, chemical injection, booster pumps, and elevation changes. All of these conditions

must be considered when determining backflow protection. Some hazards relating to irrigation

Systems are: fertilizers, herbicides, pesticides and fecal matter including animal waste (domestic and non domestic).

What type of backflow prevention assemblies are allowed in irrigation systems?

The Town of Essex only allows devices to be installed on irrigation systems connected to the municipal potable water system that are listed in the Massachusetts DEP regulation 310 CMR 22.

Are there any other backflow devices required for residential homes?

Yes, All outdoor faucets and hose bibs that have threaded connections where a garden hose can be attached are required to have backflow prevention protection. This may be in the form of a frost-proof automatic draining outdoor faucet with built in backflow preventer or by the use of a screw on Hose Bibb Vacuum Breaker (HBVB) that can be purchased at local hardware, home supply or plumbing supply stores.