

The Water Works Board of The Town of Ragland Cross-Connection Policy

There are many ways that a public water distribution system can become contaminated other than contamination of the source water. Less publicized, but potentially as dangerous is cross-connection problems that occur at the customer's service connection. For municipalities there can be millions of uncontrolled cross-connections within the customer's premises. Should a person become ill due to backflow contaminants through a service connection, the water system could be liable. The system is committing an unlawful act when he installs or maintains a service connection to a customer's water system with knowledge that there are or could be cross-connections on the premises. Cross-connections are ultimately the responsibility of and must be controlled by the system.

A cross-connection is any connection through which could cause a non-potable fluid to flow into a potable water system. A cross-connection becomes dangerous when a contaminated fluid passes through it and into a potable water system. This fluid flow is called backflow and means the flow of gas, water, or other material into a public or private potable water system from any source other than the distribution system. Backflow may occur at any time when there is an imbalance in the hydraulic forces in a potable water system whereby non-potable water can be forced or drawn into the potable water system. Two terms are commonly used in describing this phenomenon: backpressure and siphon age. Backflow due to back siphon age is caused by atmospheric pressure exerted upon a body of water forcing the water through a cross-connection and into a connected potable water piping system in which there is a vacuum or partial vacuum. In either case, a non-potable substance can be forced to backflow through a cross-connection into a potable water system when the hydraulic gradient is favorable. Backflow of a contaminated fluid can result in the contamination of the interconnected public or private potable water system.

Responsibility

The responsibility for controlling cross-connections is shared by Ragland Water Works, ADEM and the customer. The water system has the responsibility for protecting the public water system from all possible contamination, which includes the prevention of backflow of water or any or unwanted substance into the public water system. The ADEM has the overall responsibility for providing environmental health protection to all citizens of the state. Therefore, they have a responsibility to assure that public water supplies are operated in a manner that cross-connections, which are a serious public health matter, are addressed by each water system having an effective program to control cross-connections. The customer has the responsibility to maintain his water system free of cross-connections and to comply with all state and city laws, rules and regulations pertaining to the control of cross-connections.

All taps will require some form of approved backflow cross-connection.

The board (The Water Works Board of The Town of Ragland) requires a cross-connection prevention device on all water services. All backflow devices must be approved accepted by the Board and Superintendent as meeting an applicable specification or requirement.

The required backflow prevention device shall be installed on the customer's entire service pipe as close to the outlet side of the meter as possible. They shall be installed in the position as recommended by the manufacture and should be protected from freezing. No intervening connection or by-pass shall be between the service connection and outlet side of the device.

There must be a coordinated effort to minimize the health hazard to the users of the public water system.

Bulk Containers

The filling of bulk containers must be supplied with an air gap space and have prior approval of the Superintendent.

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