Cross Connection Control Program

Presently there are over 700 backflow prevention devices registered with the City which are tested in accordance with DEP regulations. These devices protect against contaminated water going backwards into our potable water distribution system. In addition to keeping up with Commercial, Industrial and Municipal facilities, the next area of concern will be the Survey, inspection and correction of residential cross connections due to improper lawn irrigation and home firefighting systems installations.

Contaminations from Cross-connections

Cross-connection that could contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Air gap

Atmospheric vacuum breaker

Reduced pressure backflow preventer

Double check valve assembly

Outside water taps and garden hoses tend to be the most common sources of cross connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses, when left lying on the ground, may

be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Hose bib (AVB 8B)

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We are surveying all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also review the required yearly and biannual device testing results to make sure that it is providing maximum protection.

For more information, visit the Web site of the American Backflow Prevention Association (www.abpa.org).

Davis Scribner

Water Quality Manager

C.C.C.P. Coordinator

Department of Public Services

davis.scribner@peabody-ma.gov