Dual Check Valve Devices for Residential Applications

There are many materials that today’s homeowners have access to and use each day that could cause contamination to a public water supply system, making a protective barrier against backflow contamination a beneficial consideration.

Incidents involving contamination resulting from unprotected cross-connections have been documented in communities with public water supply systems without an appropriate cross-connection control program for residents. Contamination may result from backflow conditions involving things like household chemicals or improperly handled pesticides. The installation of dual check valves is a simple and relatively inexpensive solution to the residential cross-connection problem as they can provide a line of protection against accidental contamination of a public water supply system. Residential properties (exclusive of a high-hazard condition), equipped with non-testable dual check valves, aren’t otherwise considered hazard facilities and do not require annual testing of those non-testable backflow prevention devices. Dual check valves are not in-line testable like some other backflow prevention devices, and accordingly do not require the routine testing to confirm operation.

The New Hampshire Department of Environmental Services (NHDES) encourages the use of dual check valves for residential applications. Promoting the installation of dual check valve devices in existing single family homes as part of a meter installation/replacement program is a practical consideration for water purveyors. Dual check valves are consistent with the Drinking Water and Groundwater Bureau’s (DWGB) approach of contamination containment at the water service connection. The dual check valve devices being installed should meet or exceed the ANSI/ASSE Standard 1024 for dual check valve-type backflow preventers.

It is important to note that the installation of a dual check valve would create a “closed” system and accommodations for thermal expansion would need to be made.

For More Information
Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwginfo@des.nh.gov or visit our website at des.nh.gov.

Note: This fact sheet is accurate as of July 2019. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.