
ENVIRONMENTAL Fact Sheet



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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 creates a "closed" system and accommodations for thermal expansion must be made.

Every water purveyor has an obligation to take reasonable measures to ensure a safe, potable water supply. Dual check valves provide a reasonable and cost-effective means to protect a public water supply system from contamination by residential backflow.

For Additional Information

For more information, contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov or visit <https://des.nh.gov/organization/divisions/water/dwgb/index.htm>. All of the bureau's fact sheets are online at <https://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm>.