ST. MARY'S COUNTY GOVERNMENT
DEPARTMENT OF LAND USE AND GROWTH MANAGEMENT

Jessica S. B. Andritz, Esq., Director

St. Mary's County Plumbing Fuel Gas Advisory Board

Annual Report

January 1, 2025 – December 31, 2025

Members
Bernie Taylor, Propane Industry Representative, Chair
Richard Montgomery, Master Licensed Plumber, Gasfitter & Backflow Cross Connection Seat Vice Chair
John Fluhart, Master Plumber Seat
Daniel Garrison, Master Plumber & Gasfitter Seat
Ed Hogan, Metropolitan Commission Representative
Heather Moritz, St. Mary's County Health Department Representative

Staff Support
Amber Thompson, Building Official, Department of Land Use and Growth Management
Betty Nickerson, Assistant Permit manager, Department of Land Use and Growth Management

The St. Mary's County Plumbing and Fuel Gas Board was established by the Commissioners of St. Mary's County to review plumbing and gas codes for use by the plumbing and gas trades in St. Mary's County, to hear complaints and, to render code disputes.

In January 2017 Senate Bill 140 was placed in effect a Local Plumbing Code--Repeal. The Repeal read "For the purpose of repealing a certain provision of law related to the adoption of a plumbing code in St. Mary's County; and generally relating to the repeal of a provision of law that relates to the adoption of a plumbing code in St. Mary's County".

The County Attorney at that time George Sparling made the decision to follow suit with the Senate Bill 140 decision. After a few years of discussion with the then Acting County Attorney David Weiskipf and the order of the Commissioners of St. Mary's County a new Resolution number 2019-34 was signed creating the St. Mary's County Plumbing and Fuel Gas Advisory Board.

Meetings

Per the new Board will meet bi-annually in January and June of each year.

January 14, 2025, Regular Meeting

Continued discussion on the Back Flow Cross Connection Program letter to the Commissioners of St. Mary's County

April 23, 2025, Special Meeting

Continued discussion of Back Flow Cross Connection Program letter to the Commissioners of St. Mary's County

June 10, 2026, Regular Meeting

Continued discussion on the Back Flow Cross Connection Program letter to the Commissioners of St. Mary's County

Budget

There is no current budget for the Plumbing, Fuel, Gas Advisory Board.

ST. MARY'S COUNTY GOVERNMENT
PLUMBING FUEL & GAS
ADVISORY BOARD

Bernard Taylor Chairman

MEMORANDUM

DATE: January 27, 2026

TO: Jessica Andritz, Director
Land Use and Growth Management (LUGM)

FROM: Plumbing and Fuel, Gas Advisory Board

VIA: Bernie Taylor, Chairman
Plumbing and Fuel, Gas Advisory Board

RE: Cross Connection Control and Backflow Prevention Program

Executive Summary. The St. Mary's County Plumbing and Fuel, Gas Advisory Board (Board) is recommending that the County address possible cross connection and back flow issues to prevent possible health risks due to contamination by raising public awareness and by training staff.

Historical / Background information. The Board provides advice and assistance to the Commissioners of St. Mary's County (CSMC) with respect to plumbing and fuel gas issues and to review the Plumbing and Fuel Gas Code as it is amended from time to time.

The Board meets periodically to discuss these issues related to various plumbing and fuel gas issues. Recently the members of the Board have been involved in discussion concerning cross contamination and backflow prevention issues. The Board has held a number of meetings and had numerous discussions to determine the County's responsibility with respect to protecting the public drinking water system from contamination due to a backflow event, made possible through a direct or indirect cross connection. Plumbing cross-connections, which are defined as actual or potential connections between a potable and nonpotable water supply, constitute a serious public health hazard. There are numerous, well documented cases where cross connections have been responsible for contamination of drinking water and have resulted in the spread of disease. The problem is a dynamic one, because piping systems are continually being installed, altered, or extended.[1]

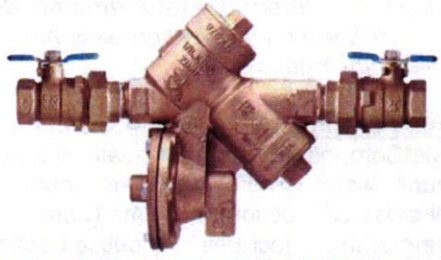


Photo 1 *Reduced Pressure Principle Backflow Preventer; these are typically installed at high hazard facilities such as hospitals, medical facilities, beauty salons and car wash facilities*

The Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE) instituted regulations (via the Safe Drinking Water Act) that require water systems to develop and implement cross connection control programs. These programs are designed to eliminate and reduce the threat of a backflow of contaminants into public water systems. The US EPA and the MDE have codified requirements where public water purveyors, (aka community

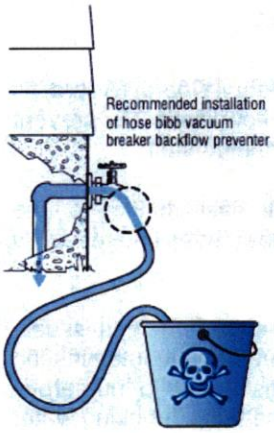
[1] Cross Connection Control Manual, EPA, 2003

water systems), must protect the potable drinking water system from possible contamination. The list of potential sources of contamination includes backflow from improperly protected or un-protected cross connections.

Under COMAR 26.04.01.32, Suppliers of water to community water systems existing before January 1, 1986, shall prepare and submit for approval to the Approving Authority by January 1, 1988, a plan for controlling cross connections. For community water systems constructed after January 1, 1988, the supplier of water shall prepare and submit for approval a plan for controlling cross connections with the plans and specifications required under Regulation .05 of this chapter or within 3 months following start-up of the water system if a construction permit has already been issued by the Approving Authority.

MDE has provided guidance on water system cross-connection control plans including definition of what is a cross-connection control program plan, why a plan should be developed and implemented, and the MDE identified what major components which should be included in a cross-connection control plan. The major components are:

(1) Identification of areas or buildings within the system's distribution where potential cross connections may exist or where cross connections control devices should be.
(2) Conducting or requiring a survey of these buildings to identify existing cross connections control devices and to identify locations where the devices should be installed.
(3) Conducting or requiring initial and yearly testing of the devices by qualified individuals. Repairing or replacing devices as needed and overhauling the devices every 5 years or in accordance with the manufacturer's recommendations.



As a part of developing a plan for controlling cross-connections and preventing backflow, a utility needs to define an approach for preventing backflow and cross-connections. Three backflow prevention and cross-connection control approaches exist for on-property and distribution system protection. The three approaches are:

(1) containment protection (protection installed immediately downstream of the utility potable water meter),
(2) isolation protection (protection installed at each fixture outlet or at each piece of water utilizing equipment, or
(3) an approach which combines both containment and isolation.

The ***2018 International Plumbing Code*** (adopted by the County in 2020) also addresses cross connection control and backflow prevention in protection of the potable water supply by requiring the design, installation, inspection and maintenance of the required appurtenances so as to prevent contamination from non-potable liquids, solids or gases from being introduced. The ***International Plumbing Code*** (§312.10.1) states that "*Annual inspections shall be made of all backflow prevention assemblies and air gaps to determine whether the assemblies are operable and air gaps exist.*"

Summary / Related Information. As part of the Board's fact-finding effort, we consulted with officials from MetCom, other area municipalities and regulatory officials at MDE. There are currently 10 known community water systems within the County that are not a Metcom owned system and may benefit from a local cross connection program. There is some concern for the potential of backflow contamination occurring at these facilities and public health impact it may have on the users. Evaluation of high risk Transient Non-Community systems (marinas) and Non-Transient Non-Community water supplies should be considered.

A *public drinking water system* is a system that provides water for human consumption to the public through pipes or other constructed conveyances, if the system has at least 15 service connections or regularly serves at least 25 individuals daily at least 60 days out of the year (COMAR 26.04.01.01)

A *community water system* is a public water system which serves at least 15 service connections used by year-round residents, or regularly serves at least 25 year-round residents (COMAR 26.04.01.01)

A *cross connection* is a permanent or temporary interconnection between a potable drinking water system and a source of contamination.

A *backflow* is the reversal of the normal flow of potable drinking water, whereas contamination has the means to enter the drinking water network as certain unfavorable hydraulic conditions occur.

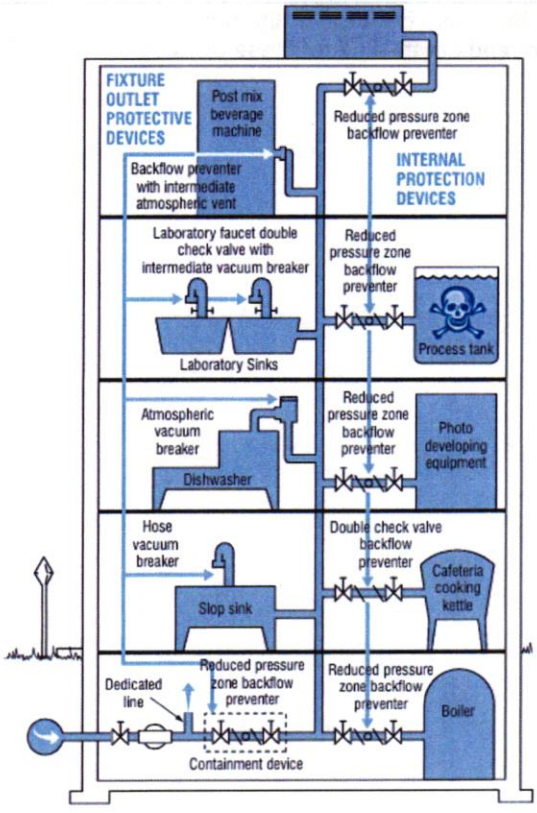


Photo 2 *Depicts several options that are open to a water purveyor when considering cross-connection protection to commercial, industrial, and residential customers. EPA, 2003*

In July 2009, following state and federal mandates, MetCom adopted a cross connection program; requirements of the program follow guidelines primarily from the American Water Works Association (AWWA) and the American Society of Sanitary Engineers (ASSE). The Cross Connection Control program is a Containment program; it addresses and controls the prevention of backflow from various water service connections where each user must be evaluated to determine the overall health or non-health risk to the public water supply imposed by the water customer's plumbing system. In order to effectively manage this program, staff developed a scope of work and contract documents for contracting firms to perform site surveys and program reporting.

The purpose of the program is to provide initial and periodic site surveys of MetCom's commercial water accounts in order to determine the degree of backflow hazard associated based on the occupancy of the building, type of water use fixtures and hazardous substances used in the building. The surveys also identify and inventory the containment backflow devices used and, depending on the degree of hazard and backflow assemblies used, determine the testing frequency of the assemblies. Residential water meters are not included in MetCom's program as the existing publicly owned water meters currently have backflow prevention.

Both "*isolation*" and "*containment*" hazards are addressed by this program. "*Isolation*" refers to point of use protection within a facility that is necessary to ensure the facility's internal potable water system is protected against backflow. "*Containment*" is the installation of a backflow prevention device or assembly between the facility and the public water distribution system. Containment minimizes the chance for water of questionable quality to leave the facility and enter the public water distribution system but does not alleviate the water customer from assuring their internal water system is properly protected from backflow. "*High Hazard*" is defined as an actual threat of contamination that presents a danger to the public health or to the integrity of the water system (such as laboratories, medical facilities, tall buildings, car washes or automotive repair facilities).

Board Recommendations.

The St. Mary's County Plumbing and Fuel, Gas Advisory Board is offering the following recommendations. These recommendations are based on numerous meetings and discussions and are listed below:

(1) Identify gaps that may exist during the initial plan review of structures that utilize a community water supply not operated by Metcom.

(2) Ensure adequate training to inspectors regarding the proper testing and approval of backflow prevention devices upon initial installation.

(3) Implement a public awareness program that encourages residents regarding the hazards backflow presents to the safety of drinking water and should include coordination with the cross connection efforts of local authorities, particularly health and plumbing officials.

(4) Research other backflow prevention compliance programs throughout the State. Backflow prevention devices require testing and maintenance in order to properly function and further protect public health. Local programs have been established throughout the State that oversee the installation, testing, replacement and compliance of these devices and should be considered in St Mary's.