Water Control Commission
240 Kensington Road ◦ Berlin, CT 06037
Office (860) 828-7065 ◦ Fax (860) 828-7180

Dear Berlin Water Control Commission (BWCC) - Homeowner

RE: Secondary Meter Irrigation Requests

The BWCC is allowing the use of a Secondary Meter to be used for irrigation and primarily outdoor water usage. Please note the attachments:

1) Secondary Meter Procedures- Questions and Answers
2) Acceptable detail of the meter arrangement in the home
3) Examples of cross-connection devices that may be necessary
4) A Fact Sheet- from Connecticut Water Company- regarding Cross Connection Inspection & Testing Program- for general background
5) CT Dept. of Public Health Code- Regulations regarding cross-connections
6) Finally, a Certification of Compliance which will be signed by the Homeowner and returned to BWCC.

Questions should be directed to me at 860-828-7065. Thank you.

Sincerely,

Ray Jarema, P.E.
BWCC Manager

Berlin Water Control Commission (BWCC)
Secondary Metering Procedures

The Berlin Water Control Commission is offering a secondary metering opportunity for water customers that use water for outside usage (irrigation, pool filling) that does not discharge into the sewer system. An attached schematic identifies the proposed acceptable location of a secondary meter. The use of a secondary meter is a convenience, but must include preventive measures that protect our system from backflow and back-siphonage (which if improperly protected could contaminate our potable water system). Therefore, it is the homeowner's ultimate responsibility that protection of our system be paramount.

Q) How do you get started?
A) Your request should be made in writing indicating your need for a secondary meter.

Q) Who pays for the installation?
A) The homeowner must have a licensed plumber make available a location for a secondary meter. The BWCC will install the meter for a flat rate of $100. The homeowner will be billed quarterly at $10 per quarter for the use of the meter.

Q) What is the rate for secondary water usage?
A) Your average water rate is $3.12 per 100 cubic feet (which is approximately 748 gallons, still a great buy). The outside water rate will be $3.50 per 100 cubic feet (hopefully this will make people more conservation-minded).

Q) What kind of cross-connection protection do I need?
A) ALL outside faucets intended to be used for irrigation shall be connected through the secondary meter and include a Watts Series 8A, or similar, hose bibb (atmospheric) vacuum breaker. Additionally, if your sprinkler system has sprinkler heads that may become flooded over and/or on a line to irrigation, or lawn sprinkler systems where chemicals are added (via injection), a reduced pressure principle backflow preventer (RPD) must be installed. (Sec 19-13-B38a (c) (2) of the Connecticut Public Health Code). (See illustration)
A vacuum breaker must be installed. An atmospheric vacuum breaker or pressure vacuum breaker is required in instances for irrigation or lawn sprinklers where "injection" chemicals are NOT added. (Sec 19-13-B38a (c) (2) of the Connecticut Public Health Code). (See illustration)

*Note- If your system has a Reduce Pressure Device (RPD), and is tested annually, you are NOT required to have an atmospheric vacuum breaker or pressure breaker.

Q) What are the maintenance and installation requirements needed from cross-connection devices?

A) The homeowner must notify BWCC before any cross-connection device is installed. The homeowner is responsible to have any RPD device tested annually and provide the result to BWCC. Note: That "All" Atmospheric vacuum breakers shall be located beyond the last control valve prior to the first outlet. All vacuum breakers shall be installed at any elevation higher than any outlet according to the manufacturer's instructions." (Sec. 19-13-1338a (f) (8) of Ct. Public Health Code).

Q) How will my water bill be determined?

A) The main meter will be used to determine total water usage. The water and sewer bill are sent quarterly on one bill, and will be determined as follows:

Potable water usage = Reading from 1st meter – 2nd meter reading
times $4.15 per 100 cubic feet

Secondary meter usage = 2nd meter reading x $4.15 per 100 cubic feet

Sewer usage = Meter 1- minus reading 2 x
Sewer rate $5.92 per 100 cubic feet

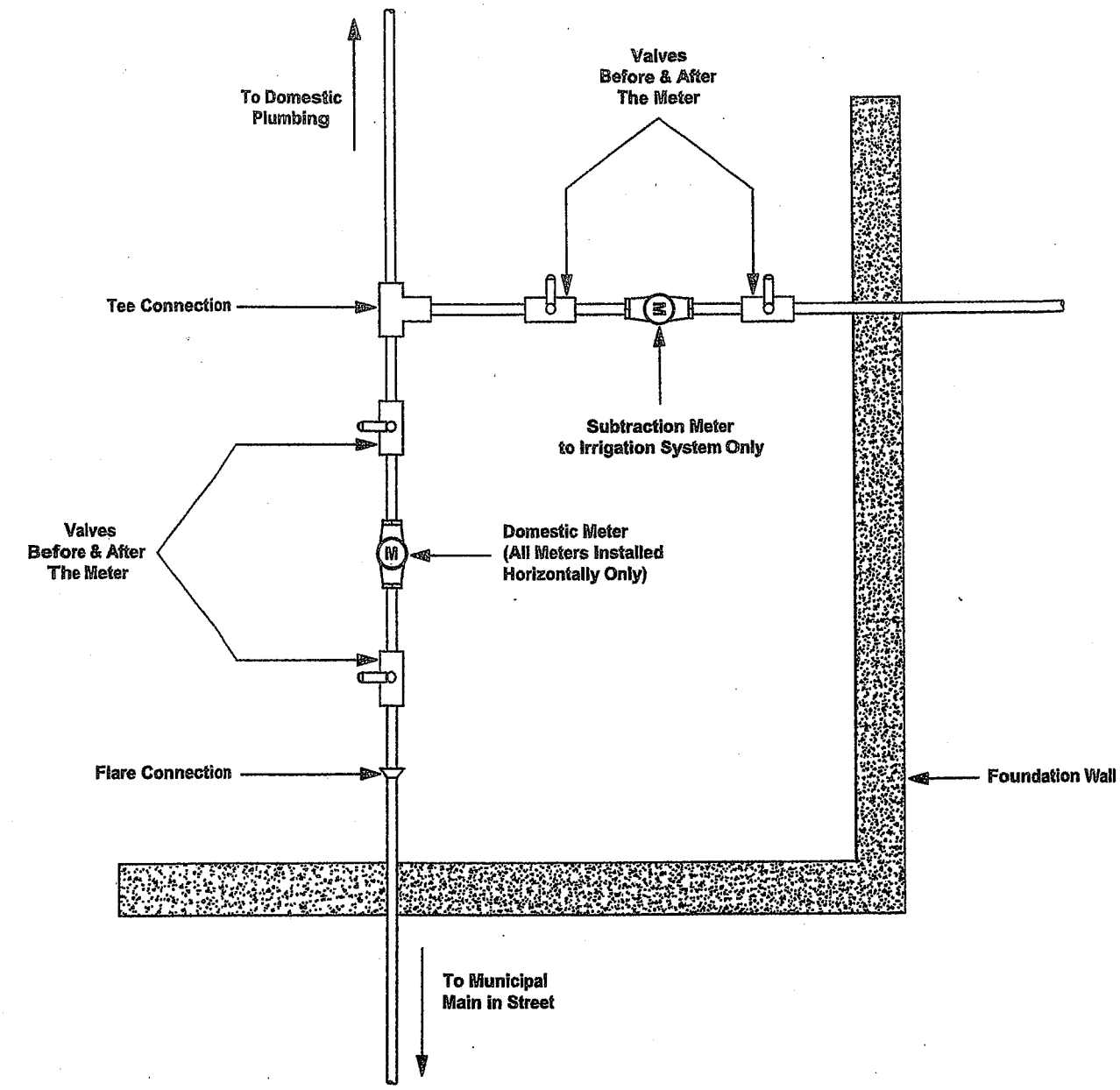
Q) Who do I call if I have a technical question?

A) You may call: 860-828-7065

Q) Who do I call with billing issues?

A) Berlin Water Control retains a 'third-party' billing company. The Connecticut Water Company may be reached at: 1-800-286-5700 during normal business hours.

Town of Berlin
Office of the
Town Engineer
240 Kensington Rd. Berlin CT 06037



* **NOTES:**

All work to be completed by property owner's contractor, other than the supply & installation of utility meter by utility company (Water Control Commission)

Not to Scale:

ENGINEERING DEPARTMENT
TOWN OF BERLIN
BERLIN, CONNECTICUT

Details for Domestic Water & Subtraction Meters

DRAWN BY: David Thorn	DATE: March 2, 2015
CHECKED:	SCALE: AS SHOWN
APPROVED: Arthur Simonian	DWG. NO.

Hose Bibb Vacuum Breakers

These small devices are a specialized application of the atmospheric vacuum breaker. They are generally attached to sill cocks and in turn are connected to hose supplied outlets such as garden hoses, slop sink hoses, spray outlets, etc. They consist of a spring loaded check valve that seals against an atmospheric outlet when water supply pressure is turned on. Typical construction is shown in Figure 18.

When the water supply is turned off, the device vents to atmosphere, thus protecting against backsiphonage conditions. They should not be used as backpressure devices. Manual drain options are available, together with tamper-proof versions. A typical installation is shown in Figure 19.

FIGURE 19.
Typical installation of hose bibb vacuum breaker.

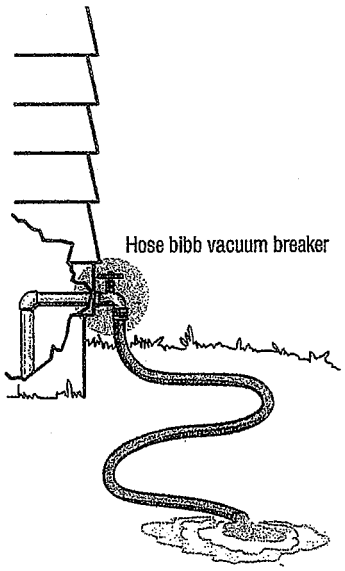
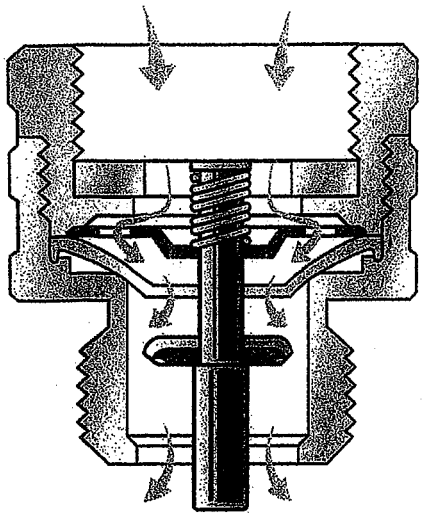


FIGURE 18.
Hose bibb vacuum breaker.



Pressure Vacuum Breakers

This device is an outgrowth of the atmospheric vacuum breaker and evolved in response to a need to have an atmospheric vacuum breaker that could be utilized under constant pressure and that could be tested in line. A spring on top of the disc and float assembly, two added gate valves, test cocks, and an additional first check, provided the answer to achieve this device. See Figure 20.

These units are available in the general configurations as shown in Figure 20 in sizes ½-inch through 10-inch and have broad usage in the agriculture and irrigation market. Typical agricultural and industrial applications are shown in Figure 21.

Again, these devices may be used under constant pressure but do not protect against backpressure conditions. As a result, installation must be at least 6- to 12-inches higher than the existing outlet.

A spill resistant pressure vacuum breaker (SVB) is available that is a modification to the standard pressure vacuum breaker but specifically designed to minimize water spillage. Installation and hydraulic requirements are similar to the standard pressure vacuum breaker and the devices are recommended for internal use.

FIGURE 20.
Pressure vacuum breaker

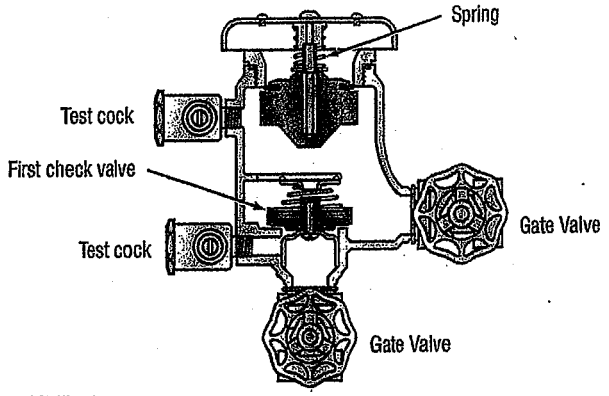
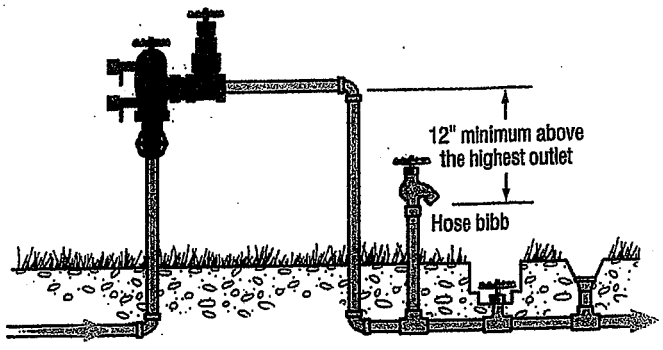


FIGURE 21.
Typical agricultural and industrial application of pressure vacuum breaker.



Atmospheric Vacuum Breaker

These devices are among the simplest and least expensive mechanical types of backflow preventers and, when installed properly, can provide excellent protection against back-siphonage. They must not be utilized to protect against backpressure conditions. Construction consists usually of a polyethylene float which is free to travel on a shaft and seal in the uppermost position against atmosphere with an elastomeric disc. Water flow lifts the float, which then causes the disc to seal. Water pressure keeps the float in the upward sealed position. Termination of the water supply will cause the disc to drop down venting the unit to atmosphere and thereby opening downstream piping to atmospheric pressure, thus preventing backsiphonage. Figure 15 shows a typical atmospheric breaker.

In general, these devices are available in ½-inch through 3-inch size and must be installed vertically, must not have shutoffs downstream, and must be installed at least 6-inches higher than the final outlet. They cannot be tested once they are installed in the plumbing system, but are, for the most part, dependable, trouble-free devices for backsiphonage protection.

FIGURE 15.
Atmospheric vacuum breaker.

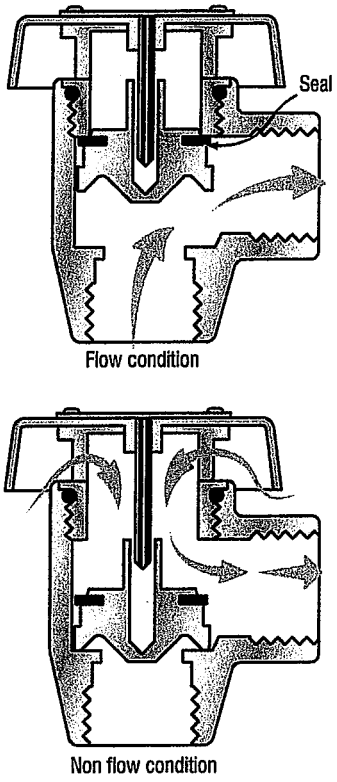


FIGURE 16.
Atmospheric vacuum breaker typical installation.

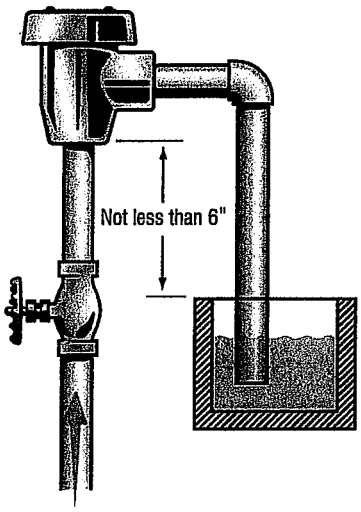
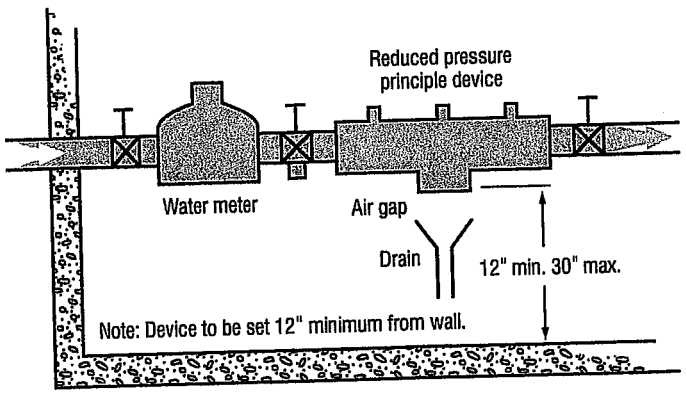


Figure 16 shows the generally accepted installation requirements—note that no shutoff valve is downstream of the device that would otherwise keep the atmospheric vacuum breaker under constant pressure.

Typical installation reduced pressure principle device horizontal illustration.

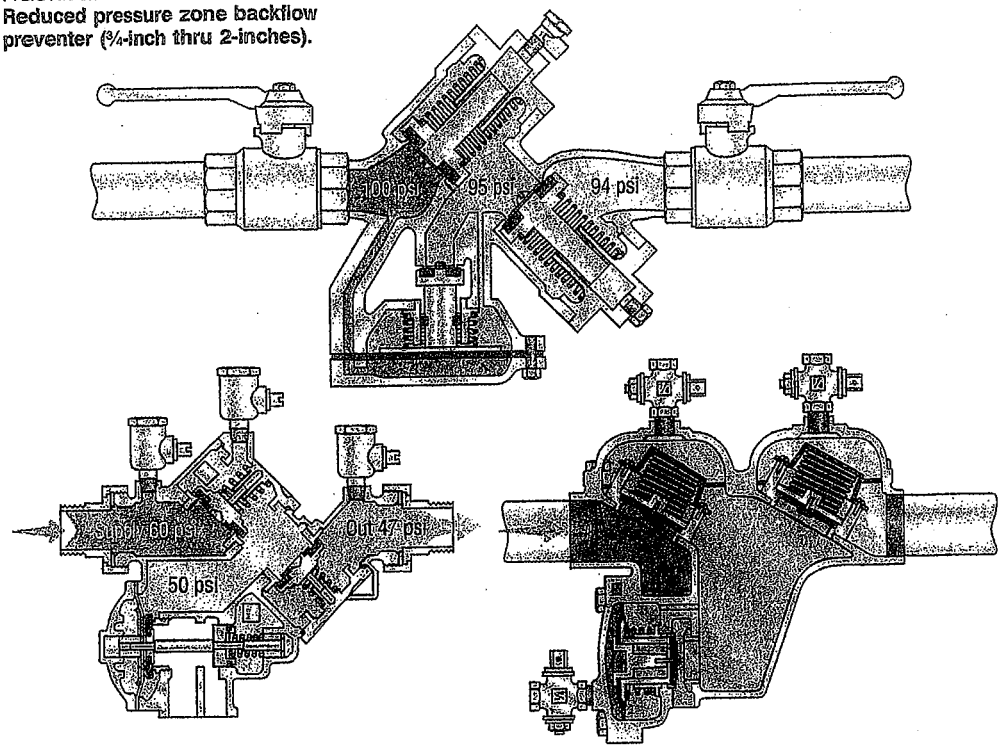


Reduced Pressure Principle Backflow Preventer

Maximum protection is achieved against backsiphonage and backpressure conditions utilizing reduced pressure principle backflow preventers. These devices are essentially modified double check valves with an atmospheric vent capability placed between the two checks and designed such that this "zone" between the two checks is always kept at least two pounds less than the supply pressure. With this design criteria, the reduced pressure principle backflow preventer can provide protection against backsiphonage and backpressure when both the first and second checks become fouled. They can be used under constant pressure and at high hazard installations. They are furnished with test cocks and gate valves to enable testing and are available in sizes ¾-inch through 10 inch.

Figure 29A shows typical devices representative of ¾-inch through 2-inch size

FIGURE 29A.
Reduced pressure zone backflow preventer (¾-inch thru 2-inches).



The principles of operation of a reduced pressure principle backflow preventer are as follows:

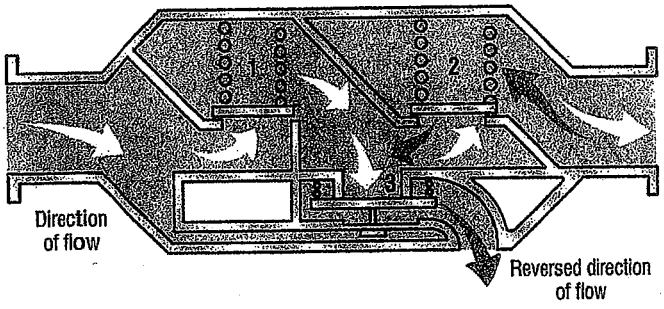
Flow from the left enters the central chamber against the pressure exerted by the loaded check valve 1. The supply pressure is reduced thereupon by a predetermined amount. The pressure in the central chamber is maintained lower than the incoming supply pressure through the operation of the relief valve 3, which discharges to the atmosphere whenever the central chamber pressure approaches within a few pounds of the inlet pressure. Check valve 2 is lightly loaded to open with a pressure drop of 1 psi in the direction of flow and is independent of the pressure required to open the relief valve. In the event that the pressure increases downstream from the device, tending to reverse the direction of flow, check valve 2 closes, preventing backflow. Because all valves may leak as a result of wear or obstruction, the protection provided by the check valves is not considered sufficient. If some obstruction prevents check valve 2 from closing tightly, the leakage back into the central chamber would increase the pressure in this zone, the relief valve would open, and flow would be discharged to the atmosphere.

When the supply pressure drops to the minimum differential required to operate the relief valve, the pressure in the central chamber should be atmospheric. If the inlet pressure should become less than atmospheric pressure, relief valve 3 should remain fully open to the atmosphere to discharge any water which may be caused to backflow as a result of backpressure and leakage of check valve 2.

Malfunctioning of one or both of the check valves or relief valve should always be indicated by a discharge of water from the relief port. Under no circumstances should plugging of the relief port be permitted because the device depends upon an open port for safe operation. The pressure loss through the device may be expected to average between 10 and 20 psi within the normal range of operation, depending upon the size and flow rate of the device.

Reduced pressure principle backflow preventers are commonly installed on high hazard installations such as plating plants, where they would protect against primarily backsiphonage potential, car washes where they would protect against backpressure conditions, and funeral parlors, hospital autopsy rooms, etc. The reduced pressure principle backflow preventer forms the backbone of cross-connection control programs. Since it is utilized to protect against high hazard installations, and since high hazard installations are the first consideration in protecting public health and safety, these devices are installed in large quantities over a broad range of plumbing and water works installations.
show typical
these devices
installations.

FIGURE 30.
Reduced pressure zone backflow preventer — principle of operation.



ConnecticutWater **Fact Sheet**

Pay your bill online by check or credit card at www.ctwater.com

Cross Connection Inspection and Testing Program

Protecting your home's drinking water supply

A cross connection exists if there is a physical connection between two separate water systems that have the potential to cause a substance of unknown quality to enter your drinking water supply. A potential cross connection (a connection between a public water system and a contaminant source) can occur when you use your garden hose to fill a swimming pool, apply pesticides, or operate your irrigation system at the same time as the system experiences a significant pressure drop, such as a water main break, major fire fighting demands or particularly heavy water usage in the system.

Always use backflow prevention devices

This can pose a significant health threat to you and your family. That is why Connecticut Water has an aggressive program in our service areas to identify potential cross connections, including those from residential irrigation systems, to make sure customers are taking steps to prevent non-potable water from entering your drinking water supply.

Here are some commonly asked questions about our cross connection inspection and testing program and specifically irrigation systems:

Q: What can homeowners do to protect from potential cross connection contamination?

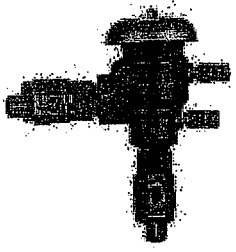
A: You can follow these steps to help keep your home's water supply safe:

- Don't submerge hoses in sinks, tubs, buckets or pools.
- Keep contaminants away from the end of a hose.
- Use a backflow prevention device when using a hose-end sprayer.
- Install and maintain a hose bibb vacuum breaker at any outdoor spigot to protect your drinking water.
- Protect your irrigation system from contaminating your drinking water with a proper backflow prevention device.

Hose Bibb Vacuum Breaker

Q: Why do I need to have my irrigation system checked?

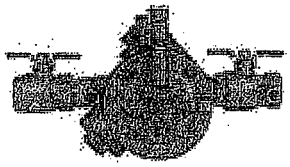
A: The State Department of Public Health (DPH) requires water companies to inspect their customers' irrigation systems every five years, to make sure they are using the appropriate backflow devices to prevent substances that could degrade the water quality from getting into the water system. To stop water from traveling from your irrigation system back into your water supply, you are required to install a backflow prevention device. Connecticut Water is required by the DPH to perform tests on backflow prevention devices in our service area on an annual basis to ensure they are working properly.



Pressure Vacuum Breaker

Q: What would cause the water from my irrigation system to flow back into the water supply or my home's plumbing?

A: Any significant increase/decrease in water pressure can cause water to flow in the opposite direction and bring along with it fertilizers, lawn chemicals or animal waste. This is called backflow and can occur due to a water main break, major fire fighting demands or particularly heavy water usage in the system.



Reduced Pressure Device

Q: If it's your water that's going into my irrigation system, what's wrong with it?

A: The water that is flowing in our mains meets state and federal water quality standards. Contamination can occur, however, when an irrigation system's sprinkler heads become submerged in puddles or standing water in your yard. A significant change in pressure can cause animal waste and lawn chemicals to enter the water system if a backflow prevention device is missing or not working properly.

Q: Why am I being charged a fee for the test?

A: The $60 fee for the first device and $40 for each additional device at the same property covers the annual test if performed by one of our certified testers. There is no charge for the inspection, which occurs every five years for typical residential accounts and annually for other facilities.

Q: Can I hire my own tester?

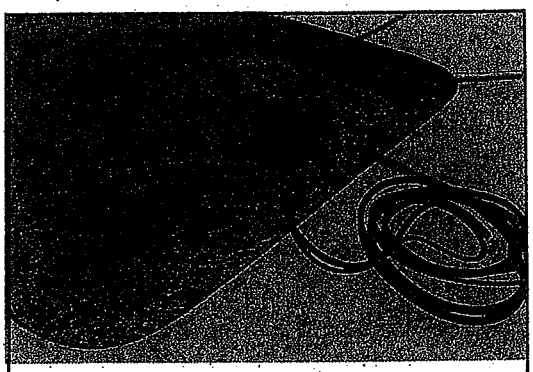
A: You can use another tester, but they must be certified by the DPH. A copy of the testing report for the device(s) along with the tester's certification number must be provided to Connecticut Water once the test is completed as we are required to submit your test results and tester's certification to the DPH annually.

It is the customer's responsibility to have the tests performed and the results submitted to us. The customer would be subject to a special charge of $40, applied to their water bill, if the results are not submitted to the water company for inclusion in the annual report to the DPH as required.

Safeguard Your Water

Take precautions to protect your drinking water

DO	Keep the end of the hose clear of possible contaminants.
DO	Buy and install inexpensive backflow prevention devices for all threaded faucets around your home. They are available at hardware stores and home-improvement centers.
DON'T	⊘ Submerge hoses in buckets, pools or sinks.
DON'T	⊘ Use spray attachments without a backflow prevention device. The chemicals used may be toxic and could be fatal if ingested.



Submerging a hose in a swimming pool could create a potential backflow hazard

If you have any questions, please feel free to call our Customer Service staff at 1-800-286-5700 or by e-mail at publicaffairs@ctwater.com.

Water Supplies

19-13-B37. Cross connections between water supplies prohibited

No physical connection between the distribution system of a public water system and that of any other water supply shall be permitted, unless such other water supply is of safe sanitary quality and the interconnection of both supplies is approved by the State Department of Public Health. No officer, board, corporation or other person or group of persons, owning, managing or controlling any public water system, shall provide new water service to a site where any person, firm or corporation either maintains such connection or is not in compliance with Section 19-13-B38a of the Regulations of Connecticut State Agencies at this location. Upon written order by the local health department or the Department of Public Health, an officer, board, corporation or other person or group of persons, owning, managing or controlling any public water system, shall terminate existing water service to a site where any person, firm or corporation either maintains such connection or is not in compliance with Section 19-13-B38a of the Regulations of Connecticut State Agencies at this location.
(Effective June 25, 1985; Amended July 7, 1993; Amended effective December 5, 2001.)

19-13-B38a. Permissible arrangements for connections to public water supply lines

(a) Definitions. As used in this section:

(1) "Air gap" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or outlet supplying water to a tank plumbing fixture, or other device, and the flood level rim of the receptacle. The vertical physical separation shall be at least two times the inside diameter of the water inlet pipe above the flood rim level but shall not be less than one inch;

(2) "Air vent type backflow preventer" means a device containing two independently operating check valves separated by a chamber which can automatically vent to the atmosphere if backflow occurs;

(3) "Atmospheric vacuum breaker" means a mechanical device which automatically air vents a pipeline to prevent backsiphonage;

(4) "Double check valve assembly" (DCVA) means a device which contains two independently acting check valves located between two tightly closing shut-off valves and fitted with properly located test cocks;

(5) "Fire sprinkler system" for fire protection purposes means an integrated system of underground and overhead piping designed to provide fire protection for a building or structure. The installation includes one or more automatic water supplies. The portion of the sprinkler system above-ground is a network of specially sized or hydraulically designed piping installed in a building, structure, or area generally overhead, and to which sprinklers are attached in a systematic pattern. The valve controlling each system riser is located in the sprinkler riser or its supply piping. Each sprinkler system riser includes a device for actuating an alarm when the system is in operation. The system is usually activated by heat from a fire and discharges water over the fire area;

(6) "Hose bibb vacuum breaker" means an atmospheric vacuum breaker designed to be attached to an outlet having a hose connection thread;

(7) "Owner" means the customer of a public water system;

(8) "Pressure vacuum breaker" means a device which contains a spring loaded check valve and a spring loaded atmospheric vent which opens when the pressure approaches atmospheric. The unit shall include two tightly closing shut-off valves located at each end of the device and two test cocks properly located for testing the device;

(9) "Reduced pressure principle backflow preventer" (RPD) means a device

containing within its structure a minimum of two independently acting, approved check valves, together with an automatically operating pressure differential relief valve located between the two check valves. The first check valve reduces the system pressure a predetermined amount so that during normal flow and a cessation of normal flow the pressure between the checks shall be less than the system pressure. In case of leakage of either check valve, the differential relief valve, by discharging to atmosphere, shall operate to maintain the pressure between the checks less than the system pressure. The unit shall include tightly closing shut-off valves located at each end of the device and each device shall be fitted with properly located test cocks;

(10) "Siamese connection" means an inlet equipped with one or more couplings to which a fire hose can be attached and through which water can be delivered by a fire department pumper to a sprinkler system; and

(11) "Toxic or objectionable substance" means any compound which could affect the public health, the potability, or the aesthetic quality of the water.

(b) Air Gap. An air gap is required between all potable water lines and equipment or systems which may be subject to contamination.

(c) Reduced pressure principle backflow preventer.

(1) A reduced pressure principle backflow preventer (RPD) is required on a line to all facilities where toxic or objectionable substances are used in addition to the required air gap, vacuum breaker or RPD on individual pieces of equipment unless the public water system has determined that an RPD is not necessary. Where such substances are used in a specific area, an RPD on the line to that area may be used in place of the RPD on the line to the facility.

(2) The owner shall install a reduced pressure principle backflow preventer (RPD) or an air gap in the following instances:

(A) On a line to fire sprinkler systems (including tanks) where chemicals are added or to foam fire fighting systems;

(B) On a line to pressurized water systems on ships;

(C) On a line used to supply car wash facilities where pressure is boosted;

(D) On a line to irrigation or lawn sprinkler systems where chemicals are added;

(E) On a line to all boiler systems where chemicals are added;

(F) On a line to heat exchangers where chemicals are added;

(G) On a line to solar heating systems where chemicals are added;

(H) On a line to plating tanks or areas. No potable water use will be allowed downstream of the device pursuant to section 19-13-B38a(e)(2) of the Regulations of Connecticut State Agencies.

(3) Unless otherwise required by sections 19-13-B38a(b) or 19-13-B38a(c) of the Regulations of Connecticut State Agencies, the owner shall install either an RPD or an air vent type backflow preventer or an air gap in the following instances:

(A) Water supply lines to all boiler systems where chemicals are not added;

(B) Water supply lines to carbonators for beverage machines, water conditioning systems, and commercial ice making equipment;

(C) Water supply lines connected to solar heating systems where chemicals are not added and heat exchangers where chemicals are not added;

(D) Water supply lines to storage tanks used for fire protection where chemicals are not added.

(d) Double Check Valve Assembly. The owner shall install a double check valve assembly (DCVA) on public water supply lines to fire sprinkler systems with siamese connections unless chemicals are added to the fire sprinkler system. Where chemicals are added to such systems, the owner shall install an RPD pursuant to Section 19-13-B38a(c)(2)(A) of the Regulations of Connecticut State Agencies. An owner may install an RPD instead of a DCVA on public water supply lines to fire sprinkler systems with siamese connections.

(e) Vacuum breaker. The owner shall install either an atmospheric vacuum breaker or a

pressure vacuum breaker or an air gap in the following instances:

(1) Irrigation or lawn sprinkler systems where chemicals are not added;
(2) Flush valve toilets;
(3) Inlets which are or may become submerged, except where an RPD is required pursuant to section 19-13-B38a(c)(2) of the Regulations of Connecticut State Agencies;
(4) Hemodialysis units;
(5) At marinas and docks on all hose bibbs or other outlets to which a hose may be connected.

(f) Installation and maintenance. The devices required by section 19-13- B38a of the Regulations of Connecticut State Agencies shall be purchased, owned, installed, and maintained by the owner in compliance with the following conditions:

(1) New devices shall conform to the revision of American Water Works Association Standard C510, C511 or the revision of the applicable standard of the American Society of Sanitary Engineering in effect at the time of building permit application.
(2) There shall be no connection made for potable water use downstream of an RPD and upstream of the equipment or systems subject to contamination except where the device is installed on the service line and the required air gap, vacuum breaker, or RPD is provided on all individual pieces of equipment.
(3) Each RPD, DCVA and pressure vacuum breaker shall be located in a room or structure that is well lighted, properly drained, and not subject to flooding. These devices shall be easily accessible for repair, testing and inspection.
(4) There shall not be any bypass around a device without appropriate protection as required by Section 19-13-B38a of the Regulations of Connecticut State Agencies.
(5) If an RPD or DCVA cannot be removed from service for maintenance and testing during normal working hours, then a second device of the same type shall be installed in parallel so as to permit inspection and repair of either unit.
(6) The owner shall notify the public water system prior to the installation of any RPD, DCVA or pressure vacuum breaker required by Section 19-13-B38a of the Regulations of Connecticut State Agencies. Immediately after installation of such devices, the owner shall arrange for the public water system to have each device tested by a person who has met the requirements of Section 25-32-11(e) of the Regulations of Connecticut State Agencies.
(7) The public water system shall have each RPD, DCVA and pressure vacuum breaker tested annually and shall maintain records of the test. Any malfunctioning device shall be promptly restored to proper operating condition by the owner. A summary of the results shall be forwarded to the Department of Public Health as a part of the annual cross connection survey report. All tests must be performed by a person who has met the requirements of Section 25-32-11(e) of the Regulations of Connecticut State Agencies.
(8) Atmospheric vacuum breakers shall be located beyond the last control valve prior to the first outlet. All vacuum breakers shall be installed at an elevation higher than any outlet according to manufacturers instructions.
(9) An atmospheric vacuum breaker shall be installed so that it is not subject to backpressure or continuous operating pressure of more than twelve (12) hours duration. Where vacuum breakers are to be installed under section 19-13-B38a(d) of the Regulations of Connecticut State Agencies and a continuous operating pressure exists, a pressure vacuum breaker shall be used.
(10) An atmospheric vacuum breaker shall be installed in such a fashion that it will not be subject to corrosion which will render it inoperative.
(11) The owner is responsible for complying with all building, plumbing, fire safety or other applicable codes, regulations or requirements.

(g) Civil Penalties.

(1) Notice of violation. When the Commissioner determines that a violation of

Section 19-13-B38a(d) of the Regulations of Connecticut State Agencies has occurred or is occurring, the commissioner may so notify the violator and may impose a civil penalty in accordance with this subsection if compliance is not achieved by the date specified in the notice of violation.

(2) Appeals. Within twenty days (20) after such notice is sent by the commissioner, an owner in receipt of a notice of violation issued pursuant to this subsection may petition the commissioner in writing, by U.S. mail, certified or registered, postage prepaid, return receipt requested, for an opportunity to contest the determination that a violation occurred, the determination a violation has not been corrected, the initial date of the imposition of the penalty, and the imposition of a penalty.

(3) Penalty. Failure to install a device required pursuant to Section 19- 13-B38a(d) of the Regulations of Connecticut State Agencies shall result in a penalty of not more than $2000.

(Effective March 7, 1989; Amended July 7, 1993; Amended effective December 5, 2001.)

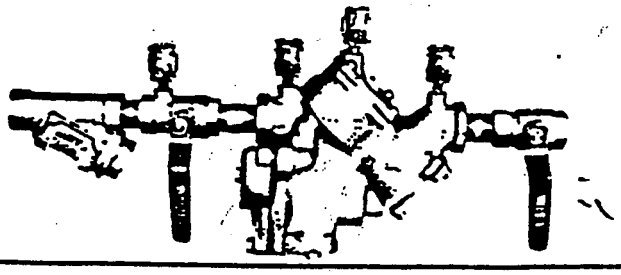
19-13-B39. Quality of water supplies made available for public and for employees

No water supply shall be used or rendered available for drinking and for other personal or domestic purposes in any industrial plan, mercantile establishment, hotel, lodging or boarding house, tenement house, hospital, theatre, park or public building, or on any outdoor or construction work, unless such supply is of safe sanitary quality approved by the state department of health. If a water supply for industrial or fire protection purposes is obtained entirely or in part from a source not approved for drinking purposes, this supply shall be distributed through an independent piping system having no connection with the systems for drinking and for other domestic use.

TOWN OF BERLIN
WATER CONTROL COMMISSION
TOWN HALL • BERLIN, CT 06037
BACKFLOW PREVENTION DEVICES

RPZ or RPD TYPE

Series 909
¾"- 10"
Series 009
¾"- 2"



EXAMPLES of INSTALLATIONS

Main Supply Lines
Commercial Boilers
Cooling Towers
Hospital Equipment
Processing Tanks
Laboratory Equipment
Waste Digesters
Car Wash
Sewerage Treatment
ALL IRRIGATION SYSTEMS - COMM. & RESIDENTIAL

REQUIRED AT METER FOR:
FUNERAL PARLORS
PLATING FACILITIES

REQUIRED ON ALL NEW FIRE SYSTEMS

Series 9D
½", ¾"

AIR VENT TYPE
DBL. CHECK

Boilers (Small)
Cooling Towers (Small) } NO CHEMICALS INVOLVED
Dairy Equipment
Residential
ALL RESIDENTIAL BOILERS

Series 98D

Size: 3/8" F.C.T.

Post-Mix Carbonated
Beverage Machine

No. N-LF9

Size: 3/8"

No. N9

Sizes: 1/4", 3/8"

Laboratory Faucets and
Pipe Lines
Barber Shop and
Beauty Parlor Sinks

Series 288A

VACUUM BREAKER

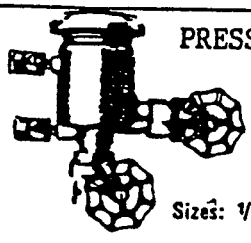
Sizes: 1/4", 3/8", 1/2", 3/4", 1",
1 1/4", 1 1/2", 2", 2 1/2", 3"

SINKS
Process Tanks (NO CHEMICALS ALLOWED)
Dishwashers

Washing Machines

(NO VALVES AFTER DEVICE)

Series 800



PRESSURE VACUUM BREAKER

Sizes: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"

Laboratory Equipment
Cooling Towers (NO CHEMICALS ALLOWED)
Comm. Laundry Machines
Swimming Pools

Lg. Toilet & Urinal Facilities

Live Stock Water Systems

Series 8

Series 8A
(Non-removable)

Series NF-8
(Non-removable with drain)
Size ¾" HT

REQUIRED ON ALL:
Hose Bibbs
Service Sinks
Hydrants

↖ For outside

WATTS products illustrated, other manufacturers are available, as long as ASSE approved

TOWN OF BERLIN
Water Control Commission
240 Kensington Road ◦ Berlin, CT 06037
Office (860) 828-7065 ◦ Fax (860) 828-7180

Certification of Compliance
with the use of a Secondary Meter for Berlin Water Control Commission Customers

I acknowledge that I have read and understand the material that was given to me regarding a Secondary Meter installation for irrigation purposes.

I agree to comply with the requirements as set forth in the information, and further recognize my annual obligation to have my cross-connection protection inspected and/or tested. The testing shall be conducted by a licensed company, and the results will be given to the Berlin Water Control Department.

If the Berlin Water Control Commission determines that there are alterations in the plumbing, or other cause to eliminate the secondary meter, Berlin Water Control will then withdraw its approval and the meter will be taken out.

_____
Signature (date)

_____
Print Name

_____
Address

_____