



## White City Water Improvement District

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## GENERAL MANAGER REPORT

With the Governor continuing to encourage Utahns to continue taking measures to deal with the COVID-19 Pandemic, White City Water Improvement District ("WCWID") continues to take precautionary steps to protect its staff and members of the public with which they interact. The office will continue to maintain "social distancing" by restricting customers to one at a time at the reception desk and to discourage the use of cash for payment of bills. We regret this action as staff enjoys interacting with the water users that have historically come to the office to pay bills. We look forward to when the restrictions can be lifted. WCWID also continues to stagger some of the staff's working hours so as to maintain distance between employees and will, until the State and County lift meeting restrictions, conduct the meetings of the Board of Trustees electronically using the "GoToMeeting" app. Member of the public can listen in on those meetings by following the instructions that will be placed at the end of posted agendas. Public comments may also be submitted by e-mail to [phashton@wcwid.org](mailto:phashton@wcwid.org). Those comments will be read into the record at the Board of Trustees meeting. Again, we look forward to when we can, once again, meet in larger groups.

## BACKFLOW PREVENTION PROGRAM

One program that cannot be deferred is enforcement of "Backflow Prevention Program." As briefly touched upon in last month's newsletter every backflow assembly in the District has been tested and certified annually by a State Certified Technician and the results delivered to the office. To answer some of the most frequently asked questions posed about the program, I am enclosing the following information:

**QUESTION:** What is a cross-connection?

**ANSWER:** A cross-connection is any temporary or permanent connection between a public water system or consumer's potable (i.e., drinking) water system and any source or system containing non-potable water or other substances. An example is the piping between a public water system or consumer's potable water system and an auxiliary water system, cooling system, or irrigation system.

**QUESTION:** What is backflow?

**ANSWER:** Backflow is the undesirable reversal of flow of non-potable water or other substances through a cross-connection and into the piping of a public water system or consumer's potable water system. There are two types of backflow... back-pressure backflow and back-siphonage.

**QUESTION:** What is backpressure backflow?

**ANSWER:** Backpressure backflow is backflow caused by a downstream pressure that is greater than the upstream or supply pressure in a public water system or consumer's potable water system.

Backpressure (i.e., downstream pressure that is greater than the potable water supply pressure) can result from an increase in downstream pressure, a reduction in the potable water supply pressure, or a combination of both. Increases in downstream pressure can be created by pumps, temperature increases in boilers, etc. Reductions in potable water supply pressure occur whenever the amount of water being used exceeds the amount of water being supplied, such as during water line flushing, firefighting, or breaks in water mains.

**QUESTION:** What is back-siphonage?

**ANSWER:** Back-siphonage is backflow caused by a negative pressure (i.e., a vacuum ~ or partial

vacuum) in a Public water system or consumer's potable water system. The effect is like, drinking water through a straw. Back-siphonage can occur when there is a stoppage of water supply due to nearby firefighting, a break in a water main, etc.

**QUESTION:** Why do water suppliers need to control cross-connections and protect their public water systems against backflow?

**ANSWER:** Backflow into a public water system can pollute or contaminate the water in that system (i.e., backflow into a public water system can make the water in that system unusable or unsafe to drink), and each water supplier has a responsibility to provide water that is usable and safe to drink under all foreseeable circumstances. Furthermore, consumers generally have absolute faith that water delivered to them through a public water system is always safe to drink. For these reasons, each water supplier must take reasonable precautions to protect its public water system against backflow.

**QUESTION:** What is a backflow preventer?

**ANSWER:** A backflow preventer is a means or mechanism to prevent backflow. The basic means of preventing backflow is an air gap, which either eliminates a cross-connection or provides a barrier to backflow. The basic mechanism for preventing backflow is a mechanical backflow preventer, which provides a physical barrier to backflow. The principal types of mechanical backflow preventer are the reduced-pressure principle assembly, the pressure vacuum breaker assembly, and the double check valve assembly (note that double check valve assemblies are not allowed on new irrigation systems). A secondary type of mechanical backflow preventer is the residential dual check valve.

**QUESTION:** What is an air gap?

**ANSWER:** An air gap is a vertical, physical separation between the end of a water supply outlet and the flood-level rim of a receiving vessel. This separation must be at least twice the diameter of the water supply outlet and never less than one inch. An air gap is considered the maximum protection available against backpressure backflow or back-siphonage but is not always practical and can easily be bypassed.

**QUESTION:** What is a reduced principle assembly (RP)?

**ANSWER:** An RP is a mechanical backflow preventer that consists of two independently acting, spring-loaded check valves with a hydraulically operating, mechanically independent, spring-loaded pressure differential relief valve between the check valves and below the first check valve. It includes shutoff valves at each end of the assembly and is equipped with test cocks. An RP is effective against backpressure backflow and back-siphonage and may be used to isolate health or non-health hazards.

**QUESTION:** What is a pressure vacuum breaker assembly (PVB)?

**ANSWER:** A PVB is a mechanical backflow preventer that consists of an independently acting, spring-loaded check valve and an independently acting, spring-loaded, air inlet valve on the discharge side of the check valve. It includes shutoff valves at each end of the assembly and is equipped with test cocks. A PVB may be used to isolate health or non-health hazards but is effective against back-siphonage only.

**QUESTION:** What is a double check valve assembly (DC)?

**ANSWER:** A DC is a mechanical backflow preventer that consists of two independently acting, spring-loaded check valves. It includes shutoff valves at each end of the assembly and is equipped with test cocks. A DC is effective against backpressure backflow and back-siphonage but should be used to isolate only non-health hazards. This assembly is not allowed on sprinkler systems, unless grandfathered.

**QUESTION:** What is a residential dual check valve (RDC)?

**ANSWER:** A RDC is similar to a DC in that it is a mechanical backflow preventer consisting of two independently acting, spring-loaded check valves. However, it usually does not include shutoff valves, may or may not be equipped with test cocks or ports, and is generally less reliable than a DC. A RDC is effective against backpressure backflow and back-siphonage but should be used to isolate only non-health hazards and is intended for use only in water service connections to single-family homes. This assembly is not allowed on sprinkler systems.