

RESOLUTION NO. 18-03-01 B  
RESOLUTION OF THE BOARD OF SUPERVISORS  
OF ENGLEWOOD WATER DISTRICT  
**CROSS CONNECTION AND BACKFLOW PREVENTION PROGRAM**

**1.0 Authority and Purpose**

Englewood Water District (District) was created pursuant to Florida Law as a Special District with the authority granted by the State of Florida, to adopt and enforce resolutions, policies and programs. The District provides safe potable water to Customers located within the District's service area. The District follows the rules and regulations of the State of Florida which are created to protect the health and welfare of the public. In order to protect the quality of the water in the public water system, the District has adopted resolutions, policies and programs to protect the water quality in the public water system from contamination through cross connections and backflow.

The purpose of the District's cross connection control and backflow prevention program is to protect the District's potable water distribution system from contaminants or pollutants that may be found within the Customer's installation. The Customer's installation shall conform to all applicable rules including County and State building codes and Health Department requirements to eliminate the possibility of contamination or pollution of potable water within the Customer's installation. There shall be no connection of a potable private well, irrigation private well, reuse irrigation system, wastewater system or similar systems of any kind to the District's potable water distribution system.

Furthermore, the Florida Department of Environmental Protection Rule, 62-555.360(2) mandates that the District comply with the rule and shall:

- Establish a cross-connection plan and implement a cross-connection control program utilizing backflow protection at or for service connections from the District in order to protect the District from contamination caused by cross-connections on Customers' premises,
- Prepare and submit cross-connection control program annual reports using a State form,
- Upon discovery of a prohibited or inappropriately protected cross-connection, the District shall ensure that the cross-connection is eliminated or ensure that appropriate backflow protection is installed to prevent backflow into the public water system or discontinue water service.

**2.0 Definitions**

**Air Gap Separation (AG)** – a physical separation between the free flowing discharge end of a potable water supply outlet and an open or non-pressure receiving vessel. An "approved" air gap separation shall be at least double the diameter of the water supply outlet measured vertically from the lowest point of the water outlet to the top most part of the rim of the vessel – in no case can the gap be less than 1 inch.

**Auxiliary Water System** – a pressurized system of piping and appurtenances using auxiliary water, which is water other than the potable water being supplied by the CWS (the District) and which includes water from any natural source such as a well, pond, lake, spring, stream, river, etc., includes reclaimed water and includes other used water or industrial fluids described in AWWA Manual M-14. However, "auxiliary water system" specifically excludes any water recirculation or treatment system for a swimming pool, hot tub, or spa. (Rule 62-555.360 F.A.C.)

**Backflow** – the reversal of flow of a liquid, gas or other substance in a piping system. (AWWA Manual M-14)

**Cross-Connection** – any physical arrangement whereby a public water supply is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains or may contain contaminated water, sewage or other waste, or liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as the result of backflow. By-pass arrangements, jumper connections, removable sections, swivel or changeable devices, and other temporary or permanent devices through which or because of which backflow could occur are considered to be cross-connections. (Rule 62-550.200 F.A.C.)

**Double Check Valve Assembly (DC)** – a backflow prevention assembly consisting of two internally loaded independently operating check valves, located between two tightly closing resilient seated shutoff valves with four properly placed test ports. (AWWA Manual M-14)

**Double Check Detector Assembly (DCDA)** – A backflow prevention assembly specially designed with a line size approved double check valve assembly with a bypass containing a specific water meter and an approved double check valve assembly. (AWWA Manual M-14)

**Dual Check (DuC)** – a backflow prevention device that contains two internally loaded, independently operating check valves. (AWWA Manual M-14)

**Reduced Pressure Backflow Assembly (RP)** – a backflow prevention assembly consisting of a mechanical, independently acting, hydraulically dependent relief valve, located between two independently operating, internally loaded check valves that are located between two tightly closing resilient seated shutoff valves with four properly placed resilient seated test ports. (AWWA Manual M-14)

**Reduced Pressure Detector Assembly (RPDA)** – A specially designed backflow assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. (AWWA Manual M-14)

### 3.0 General Policies and Procedures

The public water system can become contaminated when there is a drop in pressure in the water system and there is no backflow prevention device at a connection to the water system. A pressurized water or chemical system can also cause contamination of a water system if the pressurized system is interconnected with the water system. The intent of this Resolution is to reduce the risk of contamination of the public water supply system by identifying hazardous connections and to require a backflow prevention assembly at those locations.

Backflow prevention devices shall be installed immediately after the meter assembly and before the first distribution line off of the Customer's water service line. All properties within the District's boundaries shall have backflow protection.

In compliance with the standards set by the State of Florida, the District will determine the mandatory level of backflow protection that shall be required at the closest point to the District's water meter. At the time a new connection is made to the District's water system, the District will determine the level of protection that shall be required. Throughout a five year but not more than ten-year period the District will evaluate the status of all Customers to determine if there is a change in the level of backflow protection required. The Customer will be notified if a new assembly shall be required.

After a backflow prevention assembly is installed, a passing test report shall be submitted to the District. Backflow tests shall be done only by a certified plumber/backflow technician. Test methods for assemblies may be found on the District website. These documents will be updated from time to time. The Customer shall be held responsible to provide certification to the District that an assembly has been installed and is properly functioning. The certification shall be completed and signed by a certified plumber/backflow technician on the frequency included in this Resolution.

When the District determines that a property is a hazardous connection and is required to have a reduced pressure backflow assembly (RP), it is the Customer's responsibility to have the RP installed, tested, maintained and certified. Installation, testing, repair and certification shall be done by a certified plumber/backflow technician. Non Residential properties shall have the RP assembly tested and certified at the time of installation and re-tested and certified each year thereafter. Residential properties shall have an RP assembly tested and certified at the time of installation and re-tested and certified every 2 years thereafter. The Customer is ultimately responsible to provide a certification that the RP assembly was tested and is properly functioning.

The District shall install a dual check device as a part of the meter assembly for residential properties that are not considered a hazardous connection. A dual check is considered to be a means of minimal backflow protection. Should - the Customer choose to have an assembly that provides a higher level of protection than what is required, the assembly shall be tested based on the frequencies outlined in Section 5.0 of this Resolution.

Upon discovery of a cross-connection, the District shall notify the Customer that they are not in compliance with the Resolution. The cross-connection shall be eliminated, or the Customer shall hire a certified plumber/backflow technician to install and certify the appropriate backflow protection at the service connection. The District will discontinue water service to Customers who fail to provide certification that the appropriate protection has been provided.

The District will identify all known connections which have an “approved” air gap. The Customer is responsible to have the air gap installed, maintained and certified annually. Air gap installations shall be inspected by the District prior to placing the supply system in operation. The District shall provide the initial certification and an annual certification thereafter.

#### **4.0 Service Connection Categories**

##### **HAZARDOUS CONNECTIONS – REQUIRE REDUCED PRESSURE BACKFLOW ASSEMBLY (RP)**

Non-Residential properties

Non-Residential properties with a fire service connection - (requires a RPDA) \*

Residential properties with four or more residential units on a single meter

Residential properties with reclaimed water available

Residential properties with an irrigation system

Residential properties with a fire sprinkler system

Residential properties with a building 3 (or more) floors above finished grade elevation unless proof of no pressure booster pump exists

Residential properties with a private well or auxiliary water system

Residential properties with a water meter 1” in diameter or larger

\* Any permitted fire service connection with a DC or DCDA installed prior to October 6, 2016 shall be allowed to be maintained/repaired only if documentation stating that no chemical additives are present in the fire system can be provided to the District.

**All other residential properties shall have a Dual Check (DuC) device installed at the water meter** by the District.

#### **5.0 Test and Certification Frequencies**

All backflow prevention assemblies shall be tested and certified by a certified plumber/backflow technician.

RP/RPDA/DC/DCDA assemblies at non-residential properties shall be tested and certified annually (every year)

RP/DC assemblies at residential properties shall be tested and certified biennially (every 2 years)

DuC devices at residential properties shall be replaced by the District every 5 years but not more than 10 years

Air Gaps shall be inspected and certified annually (every year)

Passed October 6, 2016 amended March 1, 2018