CROSS CONNECTION PREVENTION AND CONTROL POLICY

SHORT TITLE.

This Policy shall be known and may be cited as "The Cross Connection Prevention and Control Policy."

AUTHORITY.

Lower Rio Grande Public Water Works Authority

www.LRGauthority.org

APPLICABILITY.

Compliance with this Policy shall be a precondition to receiving or continuing to receive water service from the Authority.

<u>DEFINITIONS.</u>

For the purpose of this Policy, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

APPROVED BACKFLOW PREVENTION ASSEMBLY. An assembly or other means designed to prevent backflow. The assembly shall be listed by the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California, accepted by the Authority and shall be limited to the following five types of assemblies unless otherwise stated:

- (1) AIR-GAP. The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet conveying potable water into a tank, plumbing fixture, receptor and the flood level rim of the receptacle.
- (2) PRESSURE VACUUM BREAKER. Consists of one independently operating spring-loaded check valve and an independently operating spring-loaded air inlet valve located on the discharge side of the check valve, two full-ported, resilient seated shut-off valves and equipped with properly located resilient seated test cocks.
- (3) REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY. Consists of two independently acting check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves, including two full-ported, resilient seated shut-off valves at each end of the assembly, and equipped with properly located resilient seated test cocks.

- (4) SPILL-RESISTENT PRESSURE VACUUM BREAKER. Consists of one independently operating spring-loaded check valve and an independently operating spring-loaded air inlet valve located on the discharge side of the check valve, two fullported, resilient seated shut-off valves and equipped with properly located resilient seated test cock and vent valve.
- (5) DOUBLE CHECK VALVE ASSEMBLY. Consists of two independently acting, approved check valves, including two full-ported, resilient seated shut-off valves at each end of the assembly and equipped with properly located resilient seated test cocks. Any existing double check valve assemblies are approved to continue in service provided that the assemblies can be maintained, tested and repair parts are available through the manufacturer.

AUXILIARY WATER SUPPLY. Any water source on or available to a premise other than the public water system.

BACKFLOW PREVENTION ASSEMBLY, CONTAINMENT. An assembly installed in a customer's water system to protect the public water system from an actual or potential threat of contamination or pollution of the public water system.

BACKFLOW PREVENTION ASSEMBLY, ISOLATION. An assembly installed within the customer's water system at the point of each cross-connection to protect the customer's potable water system from other non-potable water sources within the customer's water system.

BACKFLOW. The undesirable reversal of water flow.

CERTIFIED BACKFLOW PREVENTION ASSEMBLY TESTER. A person who holds a current certification and is employed by the Authority to test backflow prevention assemblies.

CERTIFIED BACKFLOW PREVENTION ASSEMBLY REPAIRMAN. A person who is a certified backflow prevention assembly tester and licensed by the appropriate certified training facility and employed by the Authority.

CROSS CONNECTION. An actual or potential connection between a potable water system and a non-potable water source.

CROSS-CONNECTION CONTROL CONTAINMENT. The protection of the Authority's water system by the installation of an approved backflow prevention assembly at each service connection to a customer's water system from the Authority water system, and accepted by the Authority.

CROSS CONNECTION CONTROL ISOLATION. The protection of the customer's water system by the installation of an approved backflow prevention assembly within the customer's water system at the point of each and every cross-connection.

CROSS CONNECTION ADMINISTRATOR. The Operations Manager shall administer the cross connection control program and is charged with certain duties and responsibilities by this Policy.

CROSS CONNECTION INSPECTOR. The person designated by the Operations Manager to assist in the enforcement of the Cross Connection Control Policy and who is charged with certain duties and responsibilities by this Policy. The Cross Connection Inspector shall be a certified Water Operator at a minimum of Level II and be a certified backflow prevention assembly tester.

CUSTOMER. The person responsible for payment of fees as determined pursuant to the Lower Rio Grande Public Water Works Authority's *Schedule of Rates and Fees* as it may be amended.

CUSTOMER'S WATER SYSTEM. The water system on a customer's premises beginning at the service connection.

GENERAL MANAGER. The General Manager of the Authority or his/her designee.

HAZARD, CONTAMINATION. Contamination is a hazardous substance that may cause death, illness, injury, or the spread of disease if introduced into a potable water system. Contamination includes, but is not limited to, corrosion inhibitors; anti-freeze solutions; chemical water treatment for boilers and cooling systems; fertilizers, herbicides and pesticides used in irrigation systems; heavy metals and total coliform bacteria found in fire systems; and other hazardous substances.

HAZARD, POLLUTION. A low hazard substance that will degrade the taste, color, odor or other aesthetic quality of the water if introduced into a potable water system, but will not cause death, injury or spread of disease. Pollution includes, but is not limited to, backflow of domestic water from tall buildings; backflow of domestic hot water from water heaters; and other similar low hazard substances.

COMMERCIAL WATER CUSTOMER. Any water customer who receives water service by the Authority's water system and is classified in the Authority's policies as a commercial customer

RESIDENTIAL WATER CUSTOMER. Any water customer who receives water service by the Authority's water system and is classified in the Authority's policies as a residential customer

PREMISES. A building, a tract of land with buildings, or parts of buildings thereon.

PUBLIC WATER SYSTEM. The potable water system that supplies water service to residential and non-residential water users within the service area of the Authority.

SERVICE CONNECTION. The terminal end of the water service from the public water system and point of delivery to the customer's water system, more particularly defined as follows:

- (1) The service connection for a metered water service is the downstream end of the water meter or meter setter:
- (2) The service connection for un-metered water services and fire lines which serve private fire protection systems is located at the property boundary or at the water utility easement boundary to a customer's premises; and
- (3) The service connection for a fire hydrant and all other temporary or emergency water services is located at the point of connection to the Authority's system.

WATER, POTABLE. Water delivered by the public water system intended for human consumption and meeting federal and state drinking water standards.

WATER, NONPOTABLE. Water that is not safe for human consumption or that is of questionable quality. Any water delivered by the non-potable water system and intended for irrigation use or other allowable non-potable applications.

WATER, USED. Any water delivered by the Authority to a customer's water system after it has passed the service connection.

ADOPTION OF TECHNICAL SPECIFICATIONS.

The Authority hereby adopts technical specifications to define backflow prevention assembly installation standards, guidelines and criteria set forth by the Foundation for Cross-Connection Control and Hydraulic Research at University of Southern California.

RESPONSIBILITY.

It shall be the responsibility of the Authority to administer and enforce the provisions of this Policy. This Policy also assigns responsibilities to customers and to the Authority's certified backflow prevention assembly testers and repairmen as described in this section.

(A) Authority. The Authority shall be responsible for the protection of the public water system from contamination or pollution due to the backflow of contaminants or pollutants through the water service connection. The Authority shall enforce all the provisions of this Policy that relate to cross connection control by containment; shall approve all cross connection control backflow prevention assemblies; shall administer a continuing cross connection control program; maintain a customer and backflow prevention assembly data base; and shall not knowingly install, maintain or approve installation of a water service connection unless the public water system is protected as required by this Policy.

- (B) Customer. All customers shall be responsible, without further notice, for the prevention of contaminants, pollutants or water from auxiliary water supplies from entering the customer's potable water system and the Authority's water system. The Authority shall provide at the Customer's expense, as outline in the *Member/Customer Policy* and attached *Schedule of Rates and Fees*, approved backflow prevention assemblies as required by this Policy. The customer's responsibility begins at the service connection and extends throughout the entire length of the water system within the premises. The Authority shall install, have tested, and maintain, at the Customer's expense, backflow prevention assemblies as directed by the Authority. Test reports shall be delivered to the Customer within seven (7) calendar days of testing. Accurate records of all inspections, tests, repairs and replacement of backflow prevention assemblies shall be maintained by the Authority for a period of three (3) years.
- (C) Certified backflow prevention assembly tester. Only the Authority's certified backflow prevention assembly testers are permitted to inspect and test backflow prevention assemblies installed by the Authority. They shall complete and provide accurate test reports to the Customer within seven (7) calendar days of the test.
- (D) Certified backflow prevention assembly repairman. Only the Authority's certified backflow prevention assembly repairmen are permitted to inspect and test backflow prevention assemblies installed by the Authority. They shall complete and provide accurate test reports to the Customer within seven (7) calendar days of the test.
- (E) The Authority shall provide copies of meter calibration test reports to the Customer upon their request.
- (F) Backflow Prevention Assemblies installed by Customers prior to the adoption of this Policy. The Cross Connection Administrator shall notify Customers who have installed backflow prevention assemblies prior to the adoption of this policy that the Authority shall assume responsibility for testing and repair and replacement of said assemblies at the Customer's expense. They shall complete and provide accurate test reports to the Customer within seven (7) calendar days of the test.

REQUIREMENTS.

- (A) Mandatory cross-connection control by containment:
- (1) Effective the date of adoption of this policy, all new commercial premises must have a reduced pressure principle backflow prevention assembly installed by the Authority at each service connection to the customer's water system or at a location approved by the Authority.
- (2) Effective the date of adoption of this policy, all existing commercial service connections that do not have a backflow prevention assembly shall have one installed by the Authority at the Customer's expense at each commercial service connection or at a location approved by the Authority.

- (3) All non-residential irrigation water systems connected to the Authority's system must have a pressure vacuum breaker, spill-resistant pressure vacuum breaker or a reduced pressure principle backflow prevention assembly installed by the Authority at Customer's expense at the service connection on the public water system.
- (4) All customers connected to a non-potable water system and the public water system shall have a reduced pressure principle backflow prevention assembly installed by the Authority at the Customer's expense at the potable service connection.
- (5) All fire hydrants used for drawing water for filling tanks and tank trucks and for temporary irrigation systems must have an air-gap or approved reduced pressure principle backflow prevention assembly installed by the Authority at the Customer's expense.
- (6) Any residential premises having existing private wells and who desire to connect to the Authority's water system shall have three options as follows:
- (a) Customers shall permanently abandon the use of private wells by plugging the wells as accepted by the Authority prior to connecting to the public water system; or
- (b) Customers who choose to maintain their private wells shall have installed by the Authority at the Customer's expense a reduced pressure principle backflow prevention assembly at the terminal end of the water service from the Authority's water system (e.g., service connection).
- (c) Customers shall completely sever the private well from the premises' potable plumbing system and the Authority shall ensure that a dual check meter setter is in place at the service connection.
- (7) Effective the date of adoption of this policy, all new fire line services to fire protection systems shall be equipped with a reduced pressure principal backflow prevention assembly approved by the Authority and Fire Marshal having jurisdiction at each service connection.
- (8) Premises with existing fire protection systems containing double check valve assemblies are approved to continue in service
- (9) Once an approved backflow prevention assembly for containment has been installed at a premise, it shall not be removed except by the Authority. Permanent removal of a containment backflow prevention assembly by the Customer will result in termination of water service.
- (10) All backflow prevention assemblies shall be installed in the public right-of-way or an easement dedicated to the Authority.
- (B) Waivers. Commercial customers who can demonstrate that there is no risk of cross connection and/or contamination at their premises on an annual basis by granting the Authority right of entry and inspection may be granted an annual waiver from the

requirement to have a backflow assembly installed at their premises at the Customer's expense by the Cross Connection Administrator.

- (a) In the event a contamination hazard is determined to exist, the Authority shall immediately terminate water service to the premises. The Authority shall restore water service to the premises once the contamination hazard has been controlled or eliminated.
- (b) In the event that a Customer refuses an inspection, the Authority shall install an approved assembly at the Customer's expense.
- (C) Tests and maintenance of backflow prevention assemblies. Customers shall have their existing containment and isolation backflow prevention assemblies tested by the Authority at the Customer's expense at least once a year by the Authority's certified backflow prevention assembly tester. Assemblies that fail a test shall be repaired or replaced and immediately retested by the Authority's certified backflow prevention assembly repairman. Tests, repairs and replacements shall be at the expense of the Customer. All new installations of backflow prevention assemblies shall be tested by the Authority's certified backflow prevention assembly tester immediately upon installation and test reports submitted to the Customer within seven (7) calendar days. Once the backflow prevention assembly is tested and operating properly, water service to the premises may continue.
- (D) Existing backflow prevention assemblies. Any existing backflow prevention assemblies that are not on the current list of approved backflow prevention assemblies may be approved by the Cross Connection Administrator to continue in service provided that the assemblies can be maintained, tested and repaired with parts available through the manufacturer. Whenever obsolete assemblies are replaced, they shall be replaced with current, approved backflow prevention assemblies.
- (E) Certification of testers and repairmen. To be certified as a backflow prevention assembly tester and repairman, an Authority employee with a certification of at least Operator II, shall attend a training course that has been approved by the Authority and successfully complete the written and practical examinations administered as part of the approved training course.
- (F) Re-certification of testers and repairmen. To remain active as a backflow assembly tester or repairman the certification need to be renewed every three (3) years.
- (G) Approved training courses. The Authority's Cross Connection Administrator shall approve of training courses attended by its employees.
- (H) Revocation. The Authority shall revoke certification of any it's certified backflow prevention assembly tester or repairman for any of the following reasons:
- (1) falsification of tests, records or reports;
- (2) failure to properly maintain test equipment;

- (3) alterations of an existing backflow prevention assembly without the approval of the Cross Connection Administrator or
- (4) failure to inform the Authority of an existing cross connection or a fire protection system without an approved backflow prevention assembly.

<u>FEES.</u>

The Authority shall assess fees associated with the implementation of this Policy as determined and set by the Authority's *Schedule of Rates and Fees* attached to its *Member/Customer Policy*. The fees imposed by this Policy are as follows:

- (A) Inspection fees. Customers who have granted right of entry and annual inspection in order to obtain a waiver will not be charged an inspection fee unless a reinspection is required to address issues. Then, a Reinspection Fee will be assessed.
- (B) Annual Testing Fees
- (C) Installation/Repair/Replacement Fees
- (D) Payment. All fees shall be payable Lower Rio Grande Public Water Works Authority and will be billed to the customer on their regular monthly utility bill under the terms of the *Member/Customer Policy* and the attached *Schedule of Rates and Fees*.
- (E) Responsibility of payment, liens and deposit. The persons responsible for payment of the fees included in this Policy shall be the customer upon whom charges are imposed under Authority's *Member/Customer* Policy and attached *Schedule of Rates and Fees* as it may be amended.

GROUNDS FOR TERMINATION OF WATER SERVICE UNDER THIS POLICY.

- (A) Any person who willfully removes or bypasses any approved backflow prevention assembly without prior approval of the Authority, falsifies tests records or reports, obtains water from a fire hydrant in violation of cross connection control requirements, connects a building fire protection service to a normal water service thus creating a cross-connection, or otherwise violates any provision of this Policy may have water service terminated.
- (B) In the event the Cross Connection Administrator or designee determines that a potential contamination exists and may be a threat to the public water system, water service to the premises shall be terminated immediately. The Authority shall restore water service to the premises once the customer has controlled or eliminated the contamination hazard.
- (C) If water service is terminated for any of these reasons, a turn-off and turn-on water service fee will be assessed to the customer as per the Authority's *Member/Customer Policy* and attached *Schedule of Rates and Fees*.

(D) The Authority may terminate water service for non-payment of the fees included in this Policy and in accordance with the Authority's <i>Member/Customer Policy</i> and attached <i>Schedule of Rates and Fees.</i>	