

Meeting Date: June 20, 2018 Staff Contact: Mark Kelly, Compliance Division Manager

TITLE: O-18-6 - Amendment to the Cross Connection Prevention and Control Ordinance of the Albuquerque Bernalillo County Water Utility Authority.

ACTION: Recommend Approval

BACKGROUND:

The Water Authority last updated the Cross Connection Prevention and Control Ordinance in 2008. The ordinance protects the public water supply from actual or potential contamination hazards. The New Mexico Environment Department, which administers the Safe Drinking Water Act in New Mexico requires the prevention of cross connections in the drinking water regulations.

SUMMARY:

The Cross Connection Prevention and Control Ordinance is being changed to provide clarity and options for contractors and installers. The ordinance is now clear that backflow prevention devices may be installed inside of a building as long as there are no tees or branches between a device and the service connection. The ordinance is now in compliance with the Construction Industries Licensing Act and allows devices that are independently certified by organizations accredited by the American National Standards Institute (ANSI). Fees for late test reports and not having a backflow preventer were added for non-compliance with the ordinance. Previously the only recourse for the Water Authority was to terminate service.

FISCAL IMPACT:

A nominal increase in revenue may be seen from the collection of additional fees. It is the goal of the Cross Connection Program to work with customers to bring them into compliance before fees are needed.

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. <u>0-18-6</u>

1	ORDINANCE
2	AMENDING THE CROSS CONNECTION PREVENTION AND CONTROL
3	ORDINANCE.
4	NOW, THEREFORE, BE IT ORDAINED BY THE BOARD, THE GOVERNING
5	BODY OF THE WATER AUTHORITY:
6	Section 1. Section 8 is amended as follows:
7	Section 8. Cross Connection Prevention and Control
8	8-1- <u>1</u> 2 . SHORT TITLE.
9	This Ordinance shall be known and may be cited as "The Cross Connection
10	Prevention and Control Ordinance."
11	8-1- <u>2</u> 3. APPLICABILITY.
12	Compliance with this Ordinance shall be a precondition to receiving or continuing
13	to receive water service from the Water Authority public water system.
14	8-1- <u>3</u> 4. PURPOSE <u>AND POLICY</u> .
15	(A) This Ordinance sets forth uniform requirements for, and applies to all
16	customers of the Water Authority.
17	(B) The purpose of this ordinance is to enable the Water Authority to comply
18	with applicable state and federal laws, including the Safe Drinking Water Act of 1974.
19	(C) The objectives of this Ordinance are to:
20	(1) Protect the public potable water supply from the possibility of
21	contamination or pollution by isolatingwithin the customer's internal distribution system
22	or the customer's private water systemsuch contaminants or pollutants which could
23	backflow into the public water system; and
24	(2) Establish and maintain a Cross Connection control program that
25	will systematically and effectively prevent the contamination or pollution of all potable
26	water systems under the jurisdiction of the Water Authority.
27	(D) This Ordinance provides for monitoring, compliance and enforcement
28	activities; establishes administrative and judicial review procedures; requires

1 submission of test reports; and provides for the setting of fees for inspection and

2 <u>administration</u>.

3 The purpose of this ordinance is to protect the public health, safety and welfare through

4 the prevention and control of cross connections by:

5 (A) Protecting the public water system from contamination or pollution due to

6 cross connections by containing the hazards at the service connection;

7 (B) Providing for the maintenance of a continuing program of cross-

8 connection control that will systematically and effectively reduce the risk of the

9 contamination of the public water system.

10 8-1-4. DEFINITIONS.

11 For the purpose of this Ordinance, the following definitions shall apply unless the 12 context clearly indicates or requires a different meaning.

13 APPROVED BACKFLOW PREVENTION ASSEMBLY. An assembly or other

14 means designed to prevent backflow. The assembly shall either be listed by the

15 Foundation for Cross Connection Control and Hydraulic Research of the University of

16 Southern California, or listed accepted by an ANSI Accredited Listing Agency. All

17 <u>devices must be in compliance with the State of New Mexico Drinking Water</u>

18 <u>Regulations</u>. The device the Water Authority and shall be limited to the following

19 <u>method and four (4)</u> five types of assemblies unless otherwise stated:

20 (1) AIR-GAP. The unobstructed vertical distance through the free
21 atmosphere between the lowest opening from any pipe or faucet conveying potable

22 water into a tank, plumbing fixture, receptor and the flood level rim of the receptacle. An

23 approved air gap shall be at least double the effective opening of the supply pipe or

24 <u>faucet and in no case, less than one (1) inch above the flood level. An Air-Gap is the</u>

25 only Backflow Prevention method approved between potable water and sewage, and

26 <u>between reclaimed water and sewage</u>.

27 (2) PRESSURE VACUUM BREAKER. <u>Shall consist</u> Consists of one
28 independently operating spring-loaded check valve and an independently operating
29 spring-loaded air inlet valve located on the discharge side of the check valve, two (2)
30 full-ported, resilient seated shut-off valves and equipped with <u>two (2)</u> properly located
31 resilient seated test cocks.

32 (3) REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION 33 ASSEMBLY. <u>Shall consist</u> Consists of two (2) independently acting check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves, including two (2) full-ported, resilient seated shut-off valves at each end of the assembly, and equipped with <u>four (4)</u> properly located resilient seated test cocks. <u>A reduced pressure principle backflow prevention</u> assemble is approved for containment backflow prevention assembly.

- 6 (4) SPILL-RESISTAENT PRESSURE VACUUM BREAKER. Shall consist
 7 Consists of one independently operating spring-loaded check valve and an
 8 independently operating spring-loaded air inlet valve located on the discharge side of
 9 the check valve, two (2) full-ported, resilient seated shut-off valves and equipped with
 10 properly located resilient seated test cock and vent valve.
- (5) DOUBLE CHECK VALVE ASSEMBLY. <u>Shall consist</u> Consists of two (2)
 independently acting, approved check valves, including two (2) full-ported, resilient
 seated shut-off valves at each end of the assembly and equipped with <u>four (4)</u> 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.
- ALTERNATE WATER SOURCE. Non-potable source of water that includes, but
 not limited to, gray water, on-site treated non-potable water, rainwater, and reclaimed
 (recycled) water.
- AUXILIARY WATER SUPPLY. Any water source on or available to a premises other than the public water potable water from the Water Authority. Auxiliary water supply may include water from another purveyor's public potable water supply or any natural source such as a well.
- BACKFLOW PREVENTION ASSEMBLY, CONTAINMENT. An <u>approved</u>
 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.
- 31 BACKFLOW. The undesirable reversal of water flow.
- 32 <u>BUILDING SUPPLY. The pipe carrying water from the public system or other</u> 33 <u>source of water supply to a building or other point of use or distribution on the premises.</u>
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CERTIFIED BACKFLOW PREVENTION ASSEMBLY TESTER. A person who is
 currently certified by the Water 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
mechanical classification to repair or replace backflow prevention devices in accordance
with the New Mexico Construction Industries Licensing Act, <u>NMSA 1978</u>, §§60-13-1
through 60-13-59, <u>NMSA 1978</u> and <u>is holds a current certificate issued certified</u>
backflow prevention assembly tester by the Water Authority.

HAZARD, CONTAMINATION. Contamination is <u>any</u> 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; antifreeze 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.

15 CROSS CONNECTION. An actual or potential connection between a potable16 water system and a non-potable water source.

17 CROSS CONNECTION CONTROL CONTAINMENT. The protection of the
18 public water system by the installation of an approved backflow prevention assembly at
19 each service connection to a customer's water system from the public water system.
20 No tees, branches or possible connection fittings or openings are allowed between the

21 <u>containment backflow prevention assembly and the service connection, unless</u>

22 protected by a Backflow Prevention Assembly. and accepted by the Water Authority.

23 CROSS CONNECTION CONTROL ISOLATION. The protection of the

24 customer's water system by the installation of an approved backflow prevention

25 assembly within the customer's water system at the point of each and every cross-

26 connection.

27 CROSS CONNECTION ADMINISTRATOR. The person designated by the
 28 Water Authority to administer the cross connection control program and who is charged
 29 with certain duties and responsibilities by this Ordinance.

30 CROSS CONNECTION ENGINEER. The person designated by the <u>Executive</u>
 31 <u>Director of the</u> Water Authority as a technical expert in cross connection matters
 32 <u>responsible for enforcing the Cross Connection Control Ordinance.</u> and to help the

33 Cross Connection Program Manager enforce the cross connection control ordinance.

1 The Cross Connection Engineer shall be a registered professional engineer in 2 accordance with the State of New Mexico Board of Licensure for Professional 3 Engineers and Surveyors, pursuant to the Engineering and Surveying Practice Act, 4 NMSA 1978, §§ 61-23-1 through 61-23-32, NMSA 1978 and meet all the requirements 5 of the job description approved by the Executive Director and be a certified backflow 6 prevention assembly tester. 7 CROSS CONNECTION OPERATIONS AND MAINTENANCE SUPERVISOR/ 8 INSPECTOR. The person(s) designated by the Water Authority to assist the Cross 9 Connection Program Manager in the enforcement of the cross connection control 10 Ordinance and who is charged with certain duties and responsibilities by this Ordinance. 11 The Cross Connection Operations and Maintenance Supervisor/Inspector shall be a 12 certified Water Operator Level IV and be a certified backflow prevention assembly 13 tester. 14 CROSS CONNECTION PROGRAM MANAGER. The person designated by the Water Authority to enforce the cross connection control Ordinance and who is charged 15 16 with certain duties and responsibilities by this Ordinance. The Cross Connection 17 Program Manager shall be a certified Water Operator Level IV and be a certified 18 backflow prevention assembly tester. 19 CUSTOMER. Any person, association, corporation, or entity receiving Water 20 Utility service, related products or services in the Service Area. Any The person 21 responsible for payment of fees as determined pursuant to the Albuquergue Bernalillo 22 County Water Utility Authority Water and Sewer Rates Ordinance as it may be 23 amended. 24 CUSTOMER'S WATER SYSTEM. The water system on a customer's premises 25 beginning at the service connection. 26 DOMESTIC SERVICE. Service line for potable drinking water. 27 EXECUTIVE DIRECTOR. The Executive Director of the Water Authority or 28 his/her designee. 29 NON-RESIDENTIAL WATER CUSTOMER. Any water customer who is served 30 by the public water system and is classified in the Albuquerque Bernalillo County Water 31 Utility Authority Water and Sewer Rates Ordinance as follows: 32 (1) Commercial. Retail, offices, hotels, motels, shopping centers, none

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of which use process water in the conduct of business.

1 (2) Industrial. Manufacturing or process facility, which is engaged in 2 producing a product. 3 (3) Institutional. Government buildings, hospitals, schools, and other 4 facilities that provide public and quasi-public services. 5 (4) Multifamily dwelling of three (3) or more stories. 6 HAZARD, POLLUTION. A low hazard substance that will degrade the taste, 7 color, odor or other aesthetic quality of the water if introduced into a potable water 8 system, but will not cause death, injury or spread of disease. Pollution includes, but is 9 not limited to, backflow of domestic water from tall buildings; backflow of domestic hot 10 water from water heaters; and other similar low hazard substances. 11 PREMISES. A building, a tract of land with buildings, or parts of buildings 12 thereon. 13 PRIVATE FIRE PROTECTION SYSTEM. A Private Fire Protection System 14 begins at the property boundary or at the water utility easement boundary to a 15 customer's premises. The Private Fire Protection System includes sprinkler, hose 16 connections, hydrants, reservoirs, tanks, standpipes, pumps, distribution pipes, and 17 other appurtenances within premises that are owned, operated and maintained by the 18 customer for the purpose of fire suppression. 19 PUBLIC WATER SYSTEM. The potable water system that supplies water 20 service to residential and non-residential water customers users within the service area 21 of the Water Authority. 22 RESIDENTIAL WATER CUSTOMER. Any water customer who is served by the 23 public water system and classified in the Albuquerque Bernalillo County Water Utility 24 Authority Water and Sewer Rates Ordinance as follows: 25 single-family detached, (1) 26 (2) townhouses served by individual meters, 27 (3) duplexes served by individual meters 28 (4) condominiums served by individual meters. 29 triplexes served by common or individual meters. (5) 30 mobile homes served by individual meters or for the purpose of the (5) 31 Cross Connection Ordinance 32 (6) multi-family dwelling of less than three (3) stories 33

1 SERVICE AREA. Those parts of Bernalillo County and contiguous territory 2 served by the Water Authority. 3 SERVICE CONNECTION. The terminal end of the water service from the public 4 water system and point of delivery to the customer's water system, more particularly 5 defined as follows: 6 The service connection for a metered water service is the (1) 7 downstream end of the water meter or meter setter; 8 (2) The service connection for un-metered water services and fire lines 9 which serve private fire protection systems is located at the property boundary or at the 10 water utility easement boundary to a customer's premises; or and 11 (3) The service connection for a fire hydrant and all other temporary or 12 emergency water services that is located at the point of connection to the public water 13 system. 14 SEWAGE. Wastewater and excrement conveyed in sewers. 15 WATER AUTHORITY. The Albuquerque Bernalillo County Water Utility 16 Authority. 17 WATER, NONPOTABLE. Water that does not meet federal and state drinking 18 water standards. Water that is not safe for human consumption or that is of 19 questionable quality. Any water delivered by the non-potable water system and 20 intended for irrigation, industrial or used for or other allowable non-potable applications. 21 WATER, POTABLE. Water delivered by the public water system intended for 22 human consumption and meeting federal and state drinking water standards. 23 WATER, USED. Any water delivered by the public water system to a customer's 24 water system after it has passed the service connection. 25 8-1-5. ADOPTION OF TECHNICAL SPECIFICATIONS. 26 The Water Authority shall may adopt technical specifications to define backflow 27 prevention assembly installation standards from, but not limited to, the International 28 Association of Plumbing and Mechanical Officials (IAPMO) Uniform Plumbing Code 29 (UPC), and the University of Southern California Manual of Cross Connection Control. 30 quidelines and criteria. The Water Authority shall update the current Manual of 31 Procedures and the Water Authority's portion of the City of Albuquergue's Standards 32 and Specifications for Public Works Construction to incorporate the provisions of this 33 Ordinance.

1 8-1-6. RESPONSIBILITY.

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

6 (A) Water Authority. The Water Authority shall be responsible for the 7 protection of the public water system from contamination or pollution due to the 8 backflow of contaminants or pollutants through the water service connection. The 9 Water Authority shall enforce all the provisions of this Ordinance that relate to cross 10 connection control by containment; shall approve all cross connection control backflow 11 prevention assemblies; shall administer a continuing cross connection containment 12 control program; maintain a customer and current backflow prevention assembly data 13 base; and shall not knowingly install, maintain or approve installation of a water service 14 connection unless the public water system is protected as required by this Ordinance.

15 Customer. All customers shall be responsible, without further notice, for (B) 16 the prevention of contaminants, pollutants, water from alternate sources, or water from 17 auxiliary water supplies from entering the customer's potable water system and the 18 public water system. Customers shall provide approved backflow prevention 19 assemblies as required by local plumbing codes and this Ordinance. Regardless of the 20 location of the containment backflow prevention assembly, the customer's responsibility 21 begins at the service connection and extends throughout the entire length of the water 22 system within the premises. No tees, branches or possible connection fittings or 23 openings are allowed between the containment backflow prevention assembly and the 24 service connection. Customers shall install, have tested, and maintain, at their own 25 expense, backflow prevention assemblies as directed by the Water Authority. Test 26 reports shall be delivered to the Water Authority within seven (7) calendar days of 27 testing. Accurate records of all inspections, tests, repairs and replacement of backflow 28 prevention assemblies shall be maintained by the customer for a period of three (3) 29 vears.

30 (C) Certified backflow prevention assembly tester. Only certified backflow
 31 prevention assembly testers are permitted to inspect and test backflow prevention
 32 assemblies. They shall complete and provide accurate test reports to the <u>Cross</u>
 33 <u>Connection Manager and Customer. They shall Water Authority within seven (7)</u>

1 calendar days of the test, submit test gauge reports to the customer and submit

2 calibration test reports annually to the <u>Cross Connection Manager</u> Water Authority.

3 <u>They shall</u> report to the customer and the <u>Cross Connection Manager</u> Water Authority

- 4 any discovered discrepancies or violations <u>that</u> which the tester may have observed
- 5 during the course of testing a backflow prevention assembly.
- 6 (D) Certified backflow prevention assembly repairman. Only certified backflow
 7 prevention assembly repairmen are permitted to inspect, repair, replace, and test
 8 backflow prevention assemblies. They shall complete and provide accurate test reports
 9 to the <u>Cross Connection Manager and customer</u>. <u>They shall Water Authority within</u>
- 10 seven (7) calendar days of the test, submit test gauge calibration certification reports

11 <u>annually to the Cross Connection Manager.</u> <u>They shall report to</u> the customer and the

12 Cross Connection Manager submit calibration test reports annually to the Water

13 Authority. Report to the customer and the Water Authority any discovered discrepancies

14 or violations which the repairman may have observed during the course of testing and

15 or repairing a backflow prevention assembly. Such repairman shall not change the

16 design, material or operational characteristics of a backflow prevention assembly

17 without prior approval of the <u>Cross Connection Manager</u> Water Authority.

18 8-1-7. REQUIREMENTS.

19

(A) Mandatory cross connection control by containment:

20 (1) Effective February 15, 2009 all new non-residential premises must 21 shall have a containment reduced pressure principle backflow prevention assembly 22 approved by the Water Authority installed after the at each domestic service connection 23 to the customer's water system or at a location approved by the Water Authority, as set 24 forth in the UPC and this Ordinance. No tees, branches or possible connection fittings 25 or openings are allowed between the containment backflow prevention assembly and 26 the service connection unless protected by a Backflow Prevention Assembly Uniform 27 Plumbing Code.

(2) Effective February 15, 2009 all remodeled non-residential
premises, when the work area of the building undergoing repairs, alterations or
rehabilitation, as defined in the International Existing Building Code, exceeds 50 percent
of the aggregate area of the building regardless of the costs of repairs, alteration, or
rehabilitation, <u>shall must</u> have a <u>containment</u> reduced pressure principle backflow
prevention assembly approved by the Water Authority installed <u>after the</u> at each

1 domestic service connection to the customer's water system or at a location approved 2 by the Water Authority, as set forth in the UPC and this Ordinance. No tees, branches 3 or possible connection fittings or openings are allowed between the containment 4 backflow prevention assembly and the service connection unless protected by a 5 Backflow Prevention Assembly Uniform Plumbing Code. 6 All construction premises with temporary service connection shall (3) 7 have a containment reduced pressure principle backflow prevention assembly approved 8 by the Water Authority installed at each temporary service connection to the 9 construction site, as set forth in the UPC and this Ordinance.

10 (<u>4</u>3) All non-residential irrigation water systems connected to the public 11 water system <u>shall</u> must have a pressure vacuum breaker, spill-resistant pressure 12 vacuum breaker or a reduced pressure principle backflow prevention assembly <u>installed</u> 13 <u>after</u> at the service connection on the public water system. Such devices shall be 14 approved by the Water Authority. <u>No tees, branches or possible connection fittings or</u> 15 <u>openings are allowed between the containment backflow prevention assembly and the</u> 16 service connection.

17 at the potable service connection.

18 All non-residential customers connected via piping to an alternative (45) 19 a non-potable water source or an auxiliary water supply system and the public water 20 system shall install a containment reduced pressure principle backflow prevention 21 assembly approved by the Water Authority after the potable service connection. 22 All fire hydrants used for drawing water for filling tanks and tank (56) 23 trucks and for temporary irrigation systems must have an air-gap or approved 24 containment reduced pressure principle backflow prevention assembly in accordance to 25 the Manual of Procedures and approved by the Water Authority, as set forth in the UPC

26 and this Ordinance.

27 (67) Any residential premises having existing private wells and who
28 desire to connect to the public water system shall have two (2) options as follows:
29 (a) Customers shall permanently abandon the use of private
30 wells by plugging the wells as accepted by the Water Authority prior to connecting to the
31 public water system; or
22 (b) Output prior to connect to the public water and who are subjected by the system of the public water system; or

32 (b) Customers who choose to maintain their private wells shall
33 completely sever the private well from the premises' potable plumbing system. and

1 shall install a reduced pressure principle backflow prevention assembly approved by the

2 Water Authority at the terminal end of the water service from the public water system

3 (e.g., service connection)

4 Effective February 15, 2009, all new fire line services to private (78) 5 fire protection systems shall be equipped with a containment reduced pressure principal 6 backflow prevention assembly approved by the Water Authority and Fire Marshal having 7 jurisdiction installed after the at each service connection. No tees, branches or possible 8 connection fittings or openings are allowed between the containment backflow 9 prevention assembly and the service connection. A double check valve assembly 10 approved by the Water Authority and Fire Marshal having jurisdiction may be installed 11 instead of a reduced pressure backflow prevention assembly provided the private fire 12 protection system meets or exceed contains ANSI/NSF Standard 60 and or 61 water 13 piping throughout the entire private fire protection system, the fire sprinkler drain 14 discharges into atmosphere, and there are no reservoirs, fire department connections 15 nor-connections from auxiliary water supplies, antifreeze nor other additives.

(89) Premises with existing <u>private</u> fire protection systems containing
 double check valve assemblies <u>installed and approved by the Water Authority prior to</u>
 <u>2009</u> are approved to continue in service <u>as long as the device tests and functions</u>
 <u>properly.</u>

20 (910) Effective February 15, 2009 all remodeled non-residential 21 premises, when the work area of the building undergoing repairs, alterations or 22 rehabilitation, as defined in the International Existing Building Code, exceeds 50 percent 23 of the aggregate area of the building regardless of the costs of repairs, alteration, or 24 rehabilitation with existing private fire protection systems without a containment any 25 backflow prevention assemblies shall must be retrofitted with an approved reduced 26 pressure principle backflow prevention double check valve assembly approved by the 27 Water Authority and Fire Marshal having jurisdiction. Assembly shall be installed at 28 each private fire protection after the service connection to the customers water system. 29 Approved reduced pressure principle backflow prevention assembly shall -double check 30 valve assemblies must be installed by a person who is licensed by the appropriate 31 mechanical classification in accordance with the New Mexico Construction Industries 32 Licensing Act. Fire sprinkler system hydraulic performance shall must be verified by an 33 engineer registered in accordance with the State of New Mexico Board of Licensure for

1 Professional Engineers and Surveyors, pursuant to the Engineering and Surveying

2 Practice Act, <u>NMSA 1978</u> §§ 61-23-1 through 61-23-32, NMSA 1978.

3 (1011) Once an approved backflow prevention assembly is for 4 containment has been installed at a premises, as a cross connection control 5 containment assembly, the assembly shall not be removed without prior approval from 6 the Water Authority, customer, Containment the backflow prevention tester or the 7 backflow prevention repairman shall not have the device removed. Permanent removal 8 of a containment backflow prevention assembly will result in termination of water service 9 and/or revocation of backflow certification. Backflow prevention assemblies that cannot 10 be repaired must be replaced in-kind per the terms of this Ordinance. 11 (1112) Once an approved backflow prevention assembly assemblies may

be for containment has been properly installed the assembly shall not be modified
 inside or outside the premise.

14

(B) Inspection of premises.

15 (1) Right of entry. Whenever necessary to make an inspection to 16 enforce any of the provisions of this Ordinance, or whenever the Water Authority or its 17 authorized representative has reasonable cause to believe that there exists in any 18 building or upon any premises, any condition which may endanger the public water 19 supply makes such building or premises unsafe as defined in this Ordinance, the Water 20 Authority or its authorized representative may enter such building or premises at 21 reasonable times to inspect the same or to perform any duty imposed upon the Water 22 Authority by this Ordinance; provided that if such building or premises be occupied, the 23 Water Authority representative will he/she shall first present proper credentials and 24 demand entry; and if such building or premises be unoccupied, the Water Authority 25 representative will shall first make a reasonable effort to locate the owner or other 26 persons having charge or control of the building or premises and demand entry. If entry 27 and or inspection is refused, the Water Authority may shall immediately terminate water 28 service to the premises.

(2) Inspection of premises. The Water Authority shall schedule an
inspection at a reasonable date and time and give the customer written notice prior to
an inspection. The purpose and authority to conduct such an inspection shall be
disclosed to in the customer notice. If actual or potential cross connections, which could
result in backflow of contaminants, pollutants, and water from auxiliary water supplies or

water from the non potable water systems through the water service connection and
into the public water system, are determined to exist during the premises inspection, the
Water Authority shall evaluate the hazards and proceed as follows:

4 (a) In the event a-contamination of the public water supply
5 hazard is determined to exist, the Water Authority shall immediately terminate water
6 service to the premises. The Water Authority shall restore water service to the
7 premises once the contamination hazard has been controlled or eliminated.

8 (b) In the event no contamination is hazard or substantial 9 dangers are determined to exist, but actual or potential cross connections require 10 control by containment, the Water Authority shall give the customer written notice to 11 install an approved reduced pressure principle backflow prevention assembly as a cross 12 connection control containment assembly after at the service connection at the 13 customer's own expense. The backflow assembly shall be installed, inspected and 14 tested within fifteen (15) calendar days from the date of the notice. For good cause, the 15 Water Authority may extend the time to comply with the requirements of this Ordinance.

16 (C) Re-inspection. Re-inspection of premises shall be conducted by the
17 Water Authority to verify corrective action has been implemented as required by this
18 Ordinance.

19 (D) Installation of backflow prevention assemblies. Any contractor licensed by 20 the appropriate mechanical classification in accordance with the New Mexico 21 Construction Industries Licensing Act may install backflow prevention assemblies in 22 accordance with the UPC and this Ordinance Manual of Procedures. The contractor shall be responsible for obtaining all required approvals, such as approved plans, 23 24 permits and inspections. Such contractor shall not change the design, material or 25 operational characteristics of a backflow prevention assembly without prior approval of 26 the Water Authority.

(E) Tests and maintenance of backflow prevention assemblies. Customers
shall have their existing containment and isolation backflow prevention assemblies
tested at least once a year by a certified backflow prevention assembly tester.
Assemblies that fail a test shall be repaired or replaced <u>by a certified backflow</u>
<u>prevention assembly</u> repairman and immediately retested by a certified backflow
prevention assembly <u>tester</u> repairman. <u>A test report shall be submitted to the customer</u>
and the Water Authority within seven (7) calendar days of test, or the test will be void,

1 and retesting will be required. Tests and repairs shall be at the expense of the

2 customer.

All new installations of backflow prevention assemblies shall be tested
immediately upon installation (if/when water service is available) and test reports
submitted to the Water Authority within seven (7) calendar days or the tests will become
void and retesting would be required. Once the backflow prevention assembly is tested
and operating properly, water service to the premises may continue. Water Authority
shall inspect all newly installed containment backflow prevention assemblies.

9 The repairman and tester shall use separate tools and gauges for testing 10 backflow prevention assemblies on potable water systems, such tools and gauges are 11 never to be used on non-potable water, including alternate water sources. They shall 12 submit all test reports to the Water Authority and customer with seven (7) calendar days 13 of the test, or the test becomes void, and retesting of assembly would be required. The 14 customer shall submit all test reports to the Water Authority. The Water Authority shall 15 provide the test report form to customers, certified backflow prevention assembly 16 testers, and repairmen upon request. They shall submit test gauge calibration test 17 report annually to the Cross Connection Manager. Tests performed with a test gauge 18 that has not had a yearly calibration certification are void. Accurate records of all 19 inspections, tests, repairs, and replacement of backflow prevention assemblies shall be 20 maintained by the customer for a period of three (3) years. and repairmen. 21 (F) Existing previously approved backflow prevention assemblies. Any 22 existing backflow prevention assemblies that were previously are not on the current list 23 of approved backflow prevention assemblies may be approved to continue in service 24 provided that the assemblies test and function properly. When required, can be 25 maintained, tested and repaired with parts available through the manufacturer. 26 Whenever obsolete assemblies are replaced, they shall be replaced with current, 27 approved backflow prevention assemblies.

(G) Certification of testers and repairmen. To be certified as a backflow
prevention assembly tester, a person shall attend a training course that has been
approved by the Water Authority and successfully complete the written and practical
examinations administered as part of the approved training course. A person who is
licensed by the appropriate mechanical classification in accordance with the New
Mexico Construction Industries Licensing Act and attends and successfully completes

1 the approved training course may be certified as a backflow prevention assembly

2 repairman.

3 Re-certification of testers and repairmen. A certified tester or repairman (H) 4 who wishes wants to remain active as a backflow assembly tester or repairman shall renew their certification every three (3) years. To re-certify, prior to existing certification 5 6 expiring, testers and repairmen must complete have the following options: (1) Complete 7 an approved 40-hour training course; or (2) Complete an approved eight (8) hour 8 training course and accrue sixteen (16) hours of approved continuing education credits. 9 Otherwise, the certified tester or repairman must complete an approved 40-hour training 10 course. Testers or repairmen with non-expired certifications shall provide proof of 11 training credits earned and training course attended prior to re-certification. 12 Approved training courses. The Water Authority shall approve training **(I)** 13 courses. The approved course shall be conducted by an instructor who is a certified

tester <u>and</u> or-repairman; duration of the course shall be at least forty (40) hours; and the
 minimum material covered shall <u>either</u> be based on the University of Southern

California's Foundation for Cross Connection Control and Hydraulic Research training
course <u>or an ANSI accredited listing agency</u>.

The approved re-certification training course shall be conducted by an instructor
who is a certified tester <u>and or</u> repairman; duration of the course shall be at least eight
(8) hours and the course shall include rules, regulations, <u>the Cross Connection</u>
<u>Ordinance</u>, <u>and minimum of six (6) hours</u> practical training and practical examinations.
The instructor conducting the certification and re-certification courses shall
administer the written and practical examinations. A performance of over 70% on the
written examination and satisfactory completion of the practical examination constitutes

25 successful completion of the course.

Administrator of the approved training course or approved recertification training
 course shall submit the course syllabus once a year, or upon any changes to the
 syllabus for approval by the Water Authority.

29 (J) Revocation. The Water Authority shall revoke certification of any certified
 30 backflow prevention assembly tester or repairman for any of the following reasons:

- 31 (1) falsification of tests, records or reports;
- 32 (2) failure to properly maintain test equipment;
- 33 (3) failure to submit calibration test report annually;

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(4) alterations of an existing backflow prevention assembly without the

2 approval of the Water Authority; or

3 (5) failure to inform the Water Authority of an existing cross connection or
4 a fire protection system without an approved backflow prevention assembly.
5 8-1-8. FEES.

6 The Water Authority shall assess fees associated with the implementation of this
7 Ordinance as determined and set by the Water Authority Water and Sewer Rate
8 Ordinance. The fees imposed by this Ordinance are as follows:

9 (A) Inspection fees. An inspection fee plus applicable gross receipts tax may 10 <u>shall</u> be assessed for an inspection conducted on the customer's premises. The fee 11 shall be assessed only to those customers whose premises are not in compliance with 12 this Ordinance at the time of inspection and to recover the expenses incurred by the 13 Water Authority to inspect the premises.

(B) Administrative fees. All customers shall be assessed an annual
administrative fee plus applicable gross receipts tax for each backflow prevention
assembly located at the premises. The fee shall recover the expenses incurred by the
Water Authority to maintain records, process notices, enter test results and maintain the
database.

19 (C) <u>Late report fees. If a passing test report is not submitted by the due date,</u>
 20 <u>a late report fee may be assessed, beginning 30 days after the due date. (Per the</u>
 21 <u>Requirement Section above, the test report is only valid for seven (7) days after testing.</u>

(D) Non-existent containment backflow preventer assembly fee. Non-exempt
 service connections, which do not have a containment backflow preventer assembly, or
 have an unapproved backflow preventer assembly, may be assessed a containment
 backflow preventer assembly fee when the second notice of violation is issued for lack
 of an approved containment backflow preventer assembly.

(E) Unauthorized connection fee. Unauthorized tees, branches, connection
 fittings, or openings between the containment backflow prevention assembly and the
 service connection, may be assessed an unauthorized connection fee when the second
 notice of violation is issued for an unauthorized connection.

1 (F) Ordinance documents. Copies of this Ordinance may be obtained at the 2 Water Authority website. City Treasurer, Albuquerque/Bernalillo County Government 3 Center for a fee. 4 Manual of Procedures. Copies of the Manual of Procedures may be obtained at 5 the City Treasurer, Albuquergue/Bernalillo County Government Center, and 6 Albuquerque, New Mexico for a fee. 7 (GE) Payment. All fees shall be payable to the office of the Water Authority 8 Customer Services Division, Albuquerque/Bernalillo County Government Center, 9 Albuquergue, New Mexico, and will become delinguent fifteen (15) days following the 10 due date on the customer's statement. 11 (HF) Penalty. A penalty of 1.5% per month shall be imposed on all delinguent 12 accounts. 13 (IG) Responsibility of payment, liens and deposit. The persons responsible for 14 payment of the fees included in this Ordinance shall be the customer upon whom 15 charges are imposed under with the Water Utility Authority Water and Sewer Rates 16 Ordinance as it may be amended. 17 8-1-9. PENALTIES AND VIOLATIONS ALTERNATE METHODS TO ACHIEVE 18 COMPLIANCE. 19 (A) Notice of Violation. When the Cross Connection Manager finds that 20 a customer has violated, or continues to violate, any provision of this Ordinance or order 21 issued by the Cross Connection Manager or Engineer, the Cross Connection Engineer 22 may serve upon the customer a written notice of violation. Within fifteen (15) days after 23 receipt of the notice of violation, the customer shall give the Cross Connection Engineer 24 an explanation of the violation and a plan for correcting and preventing the violation, including the specific actions that may be required. Submission of a plan shall not 25 26 relieve the customer of liability for any violations occurring before or after receipt of the 27 notice of violation. Customers issued a third notice of violation may be required to relocate 28 (B) 29 the containment backflow prevention assembly next to the water meter, property line or 30 easement line. 31 Revocation. The Water Authority may suspend or revoke a tester's (C) certification for any of the following: 32 33 falsification of tests, records or reports; (1)

1	(2) failure to properly maintain test equipment;
2	(3) failure to submit test gauge calibration test report annually;
3	(4) recurrent submittal of inaccurate or incomplete test reports;
4	(5) alterations or removal of an existing backflow prevention assembly
5	without the approval of the Water Authority;
6	(6) failure to inform the Water Authority of an observed cross
7	connection; or
8	(7) certified backflow prevention assembly tester/repairman is working
9	outside of his/her certification.
10	(A) Remote installations of containment backflow prevention assemblies. In
11	instances where the containment backflow prevention assembly(ies) cannot be installed
12	at the service connection, the customer may install the approved backflow prevention
13	assembly(ies) at a remote location with the approval of the Cross Connection Engineer
14	or the Cross Connection Program Manager.
15	8-1-10. GROUNDS FOR TERMINATION OF WATER SERVICE UNDER THIS
16	ORDINANCE.
17	(A) Any person who willfully removes, <u>modifies</u> or bypasses any approved
18	backflow prevention assembly without prior approval of the Water Authority, falsifies
19	tests records or reports, obtains water from a fire hydrant in violation of cross
20	connection control requirements, connects an alternate water source to potable water a
21	building fire protection service, connects an auxiliary water supply to potable to a normal
22	water service, or connects Water Authority reclaimed water to non-potable water without
23	approved backflow protection, thus creating a cross connection, or otherwise violates
24	any provision of this Ordinance may have water service terminated.
25	(B) In the event the Cross Connection Engineer or Cross Connection Program
26	Manager determines that a potential contamination exists and may be a threat to the
27	public water system, water service to the premises shall be terminated immediately.
28	The Water Authority shall restore water service to the premises once the customer has
29	controlled or eliminated the contamination hazard.
30	(C) Failure to install required backflow prevention assemblies as directed by
31	the Water Authority, failure to conduct required tests, failure to submit accurate test
32	reports within seven (7) calendar days of the test, failure to perform testing and
33	maintenance of backflow prevention assemblies, or failure to allow the Water Authority

entry into a premises shall constitute grounds for termination of water service to the
premises. Service shall not be restored until such conditions or defects are corrected.
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 <u>Albuquerque Bernalillo County</u>
Water Utility Authority Water and Sewer Rates Ordinance.

6 (D) The Water Authority may terminate water service for non-payment of the
7 fees included in this Ordinance and in accordance with the <u>Albuquerque Bernalillo</u>
8 <u>County</u> Water Utility Authority Water and Sewer Rates Ordinance as it may be
9 amended.

10 8-1-11. TERMINATION OF WATER SERVICE; HEARING.

(A) The Cross Connection Engineer or the Cross Connection Program
Manager may terminate the water service to the property for failure on the part of the
customer to comply with any provision of this Ordinance.

(B) In order to terminate service, a written notice shall be sent to the customer
giving him/her at least ten (10) calendar days' notice of the <u>proposed</u> termination of
water service and notice of his/her right to protest the Cross Connection Engineer's or
Cross Connection Program Manager's action at a hearing.

18 (C) In the event a hearing is requested, the water service shall not be 19 terminated until and in accordance with the decision of the hearing officer. However the 20 Cross Connection Engineer or Cross Connection Program Manager shall immediately 21 terminate water service to the premises in the event that contamination is determined to 22 exist or entry for an inspection to a premises is denied.

(D) The customer must request that a hearing be held by delivering such
request in writing to the Executive Director on or before the date the water services are
to be terminated. In the case of immediate termination, such written request shall be
delivered within ten (10) calendar days after the date of termination.

(E) At such hearing, the customer may present evidence as the Hearing
Officer finds relevant. The Hearing Officer shall make findings, conclusions and
recommendations to the Executive Director. The Executive Director may affirm, overrule
or modify the decision to terminate the services. The decision shall be final.

(F) A non-refundable hearing fee of \$50.00 shall accompany each request for
 hearing pursuant to this Section.

1	Section 2. SEVERABILITY CLAUSE. If any section, paragraph, sentence,
2	clause, work or phrase of this Ordinance is for any reason held to be invalid or
3	unenforceable by any court of competent jurisdiction, such decision shall not affect the
4	validity of the remaining provisions of this Ordinance. The Authority hereby declares
5	that it would have passed this Ordinance and each Section, paragraph, sentence,
6	clause, word or phrase thereof irrespective of any provision being declared
7	unconstitutional or otherwise invalid.
8	Section 3. EFFECTIVE DATE AND PUBLICATION. This Ordinance shall
9	become effective August 1, 2018, after publication by title and general summary.
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