



DATE: 4/16/2024

TIME: 10:00 a.m.

LOCATION: Executive Boardroom

COMMITTEE MEMBERS: Tamika Duplessis, Ph.D., Chair | Robin Barnes | Joseph Peychaud |

Lynes R. Sloss | Hon. Freddie King, III | Stephen Nelson | Ann Wilson | Michael Evans | Rene Gonzalez

Plumbing Committee Meeting Agenda

I. Roll Call

II. Action Item

- A. Resolution (R-069-2024) Amendment of Section 14 of the Sewerage and Water Board of New Orleans Plumbing Code Relative to Cross Connection Control – Nine Henriksson, Infrastructure Project Manager II, Sewerage and Water Board of New Orleans Business Services

III. Public Comment

IV. Adjournment

PROPOSED CHANGES TO SWBNO PLUMBING CODE

Presented by Nine Henriksson

April 16, 2024





Reference	Existing Code	Proposed Change
1.2 Definitions of Terms	There are currently 139 definitions within this section starting with Administrative Authority and ending with Yoke Vent.	Adopt the 51 definitions.
4.6.2 Health or Safety	Wherever compliance with all the provisions of this Code fails to eliminate or alleviate health or safety hazards, the owner or his agent shall be ordered by the Administrator of Plumbing to install such additional plumbing equipment or make such alterations as may be necessary to abate such condition.	Wherever compliance with all the provisions of this Code fails to eliminate or alleviate health or safety hazards, the owner or his agent shall be ordered by the Administrator of Plumbing or the authorized representative , to install such additional plumbing equipment or make such alterations as may be necessary to abate such condition. Failure to comply may result in an immediate water service interruption.
2.24 Property Owner's Responsibility	No property owner shall cause, or permit any installation, connection, addition, or alteration to be made to any water, drain, soil, waste pipe, or any pipe connected thereto, unless a permit therefore shall have first been issued by the Plumbing Department of the Sewerage and Water Board; nor shall any property owner suffer or permit any violation of these rules to continue after having been notified thereof in writing by the Sewerage & Water Board.	SECTION 14 – The Property Owner shall, at the Property Owner's own expense, be responsible for installation, operation, repair, testing and maintenance of the backflow prevention assemblies required by the Administrative Authority. The Property Owner shall advise the water purveyor in advance of when a device is to be tested to allow the water purveyor the opportunity to witness the test. Refer to Section 2.24 Property Owner's Responsibility for additional information.



Reference	Existing Code	Proposed Change
14 Administrative Authority's rights	No existing code regarding the Administrative Authority's rights.	Notwithstanding anything herein to the contrary, the Administrative Authority/Water Purveyor are authorized to take additional actions which may not be specifically covered herein that are deemed necessary to protect the public water system from potential or actual cross connections in accord with the requirements.
14 Non-compliance by registered technicians or general testers	2.3.8 – Suspension or Revocation states "Such suspension or revocation shall be effective only after a decision by the Board. The Master Plumber shall be sent a copy of the written charges on which the Plumbing Conference Committee's recommendation is based and shall have the right to exercise all legal rights, presenting evidence and witnesses in his behalf at a hearing."	<p>The local registration of a technician or general tester may be revoked or suspended for noncompliance.</p> <p>Any of the following conditions constitute non-compliance:</p> <ol style="list-style-type: none"> 1. Improper testing or repair of backflow prevention assemblies or methods; 2. Improper reporting of the results of testing or of repairs made to backflow prevention assemblies or methods; 3. Failure to meet registration requirements; 4. Failure to submit installation and/or test records after ten (10) days of completion. <p>Refer to Section 2.3.8 – Suspension or Revocation for additional information.</p>
14 Technician Registration	No existing code regarding requirements for Technician Registration.	All backflow prevention assembly technicians licensed by the State of Louisiana must register with the local Administrative Authority before performing work to the potable water distribution system . Any licensed backflow prevention assembly technician shall include his or her state registration number as well as proof of their Water Supply Protection Specialist (WSPS) endorsement on all correspondence and forms required by or associated with this ordinance.



Reference	Existing Code	Proposed Change
14 Standard Guide for Containment and Isolation Practices	No existing code for containment and isolation practices for Backflow Prevention.	Annex Standard Guide for Containment and Isolation Practices tables. Specifically, Restaurants/Commercial Kitchens will be required to have the appropriately sized Reduced Pressure Principle Backflow Prevention Assembly.
14 Enforcement	No existing code for Enforcement of Backflow Program.	1. Failure to have backflow assemblies tested upon installation and by the annual test due date and a report thereof to be received by the Administrative Authority may result in a non-compliance fee being charged on the customers water bill. This charge may occur monthly until a passing test report has been received by the Administrative Authority. 2. If, after three (3) months of being charged a monthly non-compliance fee, the customer has not submitted a test report, or if the customer refuses to comply with the state regulations and the rules of this code, the Administrative Authority may exercise the right to terminate water service to the property. Water service may not be reestablished until a state registered backflow technician notifies the Infrastructure Project Manager Environmental Affairs Backflow Section of the scheduled test date.

**RESOLUTION TO AMEND SECTION 14 OF THE SEWERAGE AND WATER BOARD
OF NEW ORLEANS PLUMBING CODE RELATIVE TO
CROSS CONNECTION CONTROL**

WHEREAS, Section 14 of the Plumbing Code of the Sewerage and Water Board of New Orleans, currently provides requirements to relative to Cross Connection Control and;

WHEREAS, changes to LA Department of Health and International Plumbing Code regulations requires the update of Section 14 of the Sewerage and Water Board Plumbing Code relative to Cross Connection Control; and

WHEREAS, these changes to Section 14 of the Sewerage and Water Board of New Orleans Plumbing Code were reviewed and approved by the Plumbing Conference Committee on April 9, 2024; and

NOW THEREFORE, BE IT RESOLVED, that the Sewerage and Water Board of New Orleans hereby amends Section 14 of the Sewerage and Water Board of New Orleans Plumbing Code relative to Cross Connection Control as approved by the Plumbing Conference Committee.

I, Ghassan Korban, Executive Director,
Sewerage and Water Board of New Orleans, do hereby
certify that the above and foregoing is a true and
correct copy of a resolution adopted at the Regular
Monthly Meeting of said Board, duly called and held,
according to law, on April 17, 2024.

**GHASSAN KORBAN, EXECUTIVE DIRECTOR
SEWERAGE AND WATER BOARD OF NEW ORLEANS**

SECTION 14
ORDINANCE
ORDINANCE NO.

ORDINANCE ON CROSS CONNECTION CONTROL

Sec. XX.X. Cross-Connection Control Device or Method Required.

Each existing or new structure is required to implement and maintain an adequate cross-connection control device or method for backflow prevention as mandated under state law and state regulations.

Sec. XX.X. Definitions.

The following definitions shall apply only to this Division. For those terms not defined in this Division, the definitions contained in the Louisiana Amended 2021 International Plumbing Code (2021 IPC LA amended), shall apply.

1. “Administrative authority” means the SWBNO, or any agent, employee, officer, department, or board of the Parish designated to enforce this ordinance.
2. “Approved” means accepted or acceptable under an applicable specification or standard stated or cited in the code, or accepted as suitable for the proposed use under procedures and authority of the administrative authority.
3. “Approved backflow prevention assembly for containment” means an air gap meeting ASME Standard A 112.1.2 - 1991 (R 1998) “Air Gaps in Plumbing Systems” or a backflow prevention assembly which is listed by the University of Southern California-Foundation for Cross Connection Control and Hydraulic Research (USCFCCCHR) as having met the requirements of ANSI/AWWA Standard C510-97 or ASSE Standard 1015-1993, “Double Check Valve Backflow-Prevention Assemblies”, or ANSI/AWWA Standard C511-97 or ASSE Standard 1013-1993, “Reduced- Pressure

Principle Backflow Assemblies” for containment. The listing shall include the limitations of use based on the degree of hazard. This term shall additionally include those backflow prevention assemblies meeting ANSI/ASSE Standard 1047-1995, “Backflow Preventer, Reduced Pressure Detector Assembly”, or ANSI/ASSE Standard 1048-1995, “Backflow Preventer, Double Check Detector Assembly”. (These detector assembly devices are often used on fire protection/fire sprinkler systems to detect and monitor unauthorized water usage.)

4. “Approved backflow prevention assembly for containment in fire protection system” means a backflow prevention assembly to be used in a fire protection system which also meets the two requirements of Factory Mutual Research Corporation (FM) and Underwriters Laboratory (UL) and the requirement of the standard Codes adopted by the SWBNO. Devices sized smaller than 2½ inches which have not been listed by Underwriters Laboratory (UL) and tested by FM may be allowed if approved by the State Fire Marshal. Any such device under this definition shall minimally meet the definition of an “approved backflow prevention assembly for containment”. In addition, the type of assembly to be used for a particular application/degree of hazard shall be selected and installed in accord with the requirements of Table 608.18.1 of 2015 IPC (LA amended).

5. “Approved testing agency” means an organization primarily established for purposes of testing to approved standards and approved by the administrative authority (e.g., American Society of Mechanical Engineers (ASME), American Society of Sanitary Engineers (ASSE), American Water Works Association (AWWA), American National Standards Institute (ANSI), Factory Mutual Research Corporation (FM), Underwriters Laboratory (UL), University of Southern California Foundation for Cross Connection Control and Hydraulic Research (USC-FCCCHR), etc.).

6. “Auxiliary water supply” means any water supply on or available to the premises other than the Administrative Authority's approved public water supply such as, but not limited to, a private well, pond or river.

7. “Backflow” means the flow of water or other liquids, mixtures, or substance into the distribution pipes of a potable supply of water from any sources other than its intended source.

8. “Backflow connection” means any arrangement whereby backflow can occur.

9. “Backpressure backflow” means backflow due to an increase in the customer’s pressure above the supply pressure. This may be due to pumps, boilers, gravity or other sources of pressure.

10. “Backflow preventer” means a device or method to prevent backflow into the potable water system.

11. “Backflow prevention assembly general tester” means those individuals holding a testing certificate from a nationally recognized backflow certification organization approved by the State Health Officer. Such individuals are not required to be a licensed plumber and are authorized to perform tests of backflow prevention devices and methods. When such devices or methods are located on private property, a backflow prevention assembly general tester is not authorized to install, repair, or maintain such devices or methods. A general tester, who has successfully completed a 16-hour credited repair class in accordance with the TREEO standards, may perform maintenance or repairs, if the backflow prevention assembly or device is under complete control of the water purveyor or administrative authority and is located on public property, after having obtained approval from the water purveyor.

12. “Backflow prevention assembly technician” means a water supply protection specialist licensed by the State Plumbing Board of Louisiana pursuant to LA. R.S. 37:1361, et seq., and its implementing regulations (LAC 46:LV.101, et seq.). All water supply protection specialists are Louisiana licensed plumbers who hold such a special endorsement on their plumbing license. Such individuals are authorized to test, install, repair, and maintain backflow prevention devices and methods.

13. “Backsiphonage” means the reverse flowing of used, contaminated, or polluted water from a

plumbing fixture or vessel into a water supply pipe due to a negative pressure in such pipe. (See “backflow”)

14. “Code” The word “code” or “this code”, when used alone, shall mean these regulations, subsequent amendments thereto or any emergency rule or regulation which the administrative authority having jurisdiction may lawfully adopt. It shall also mean the 2021 IPC (LA amended) and applicable rules and regulations as administered by the State Plumbing Board of Louisiana.

15. “Containment” means a method of backflow prevention which requires the installation of an air gap or a backflow prevention assembly immediately following the water meter or as close to that location as deemed practical by the administrative authority.

16. “Contamination” means an impairment of the quality of the potable water which creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids or waste. Also defined as “high hazard.”

17. “Cross connection” means any connection or arrangement, physical or otherwise, between a potable water supply system and any plumbing fixture or any tank, receptacle, equipment or device, through which it may be possible for non-potable, used, unclean, polluted or contaminated water, or other substances, to enter into any part of such potable water system under any condition.

18. “Customer” means the owner, operator, or occupant of a building or property which has a water service from a public water system, or the owner or operator of a private water system which has a water service from a public water system. “Customer” shall not include any residential connection used for dwelling purposes, unless:

a. the residence is also used as a business premises and the home-based business or occupation involves operation of a home-based business or occupation which the water purveyor or Parish Inspector deems a potentially significant and high hazard to the SWBNO water supply;

- b. the domestic water service provided is also used for a landscape irrigation system; or, iii.)
- a separate water service has been installed for landscape irrigation and other nondomestic purposes.
- c. the domestic water service is used to fill a swimming pool or hot tub through a direct connection which does not employ an approved air gap.

19. “Degree of hazard” means the rating of a cross connection or water service which indicates if it has the potential to cause contamination or pollution.

20. “Domestic sewage” means the liquid and water-borne wastes derived from the ordinary living processes, free from industrial wastes, and of such character as to permit satisfactory disposal, without special treatment, into the public sewer or by means of a private sewage disposal system.

21. “Double check valve backflow prevention assembly” means a backflow prevention assembly consisting of two independently acting internally loaded spring check valves, four properly located test cocks, and two isolation valves. Commonly referred to as a DC.

22. “Existing work” means a plumbing system, or any part thereof, which has been installed prior to the effective date of this Code.

23. “Fire protection system” means any system used for fire protection or suppression with a direct connection to the public water supply, including but not limited to sprinklers, standpipes, and Siamese connections.

24. “High hazard” see contamination.

25. “High hazard cross connection” means a cross-connection which may cause an impairment of the quality of the potable water by creating an actual hazard to the public health, through poisoning or through the spread of disease by sewage, industrial fluids, or waste.

26. “Industrial waste” means any and all liquid or water-borne waste from industrial or commercial

processes, except domestic sewage.

27. “Isolation” means a method of backflow prevention in which a backflow prevention assembly is located at the cross-connection rather than at the water service entrance. Isolation is commonly referred to as “point of use” protection.

28. “Labeled” means equipment or materials bearing a label or listing agency.

29. “Liquid water” means the discharge from any fixture, appliance or appurtenance in connection with a plumbing system which does not receive fecal matter.

30. “Listed” means equipment or materials included in a list published by a listing agency that maintains periodic inspection or current production of listed equipment or materials and whose listing states either that the equipment or material complies with approved standards or has been tested and found suitable for use in a specified manner.

31. “Listing agency” means an agency accepted by the administrative authority which is in the business of listing or labeling and which maintains a periodic inspection program on current production of listed models, and which makes available a published report of such listing in which specific information is included that the product has been tested to approved standards and found safe for use in a specific manner. (e.g., USC-FCCCHR, ASSE, etc.)

32. “Low hazard” see pollution.

33. “Low hazard cross-connection” means a cross-connection which may cause an impairment of the quality of potable water to a degree which does not create a hazard to the public health, but which does adversely and unreasonably affect the aesthetic qualities of such potable waters for domestic use.

34. “Main” means the principal artery of any system of continuous piping to which branches may be

connected.

35. “May” is a permissive term.

36. “Pharmaceutical-grade antifreeze” means a food-grade antifreeze such as an inhibited propylene glyco-based fluid.

37. “Point of entry” means the point of connection to the potable water system.

38. “Point of introduction” means the point at which any additive is introduced to the water supply system.

39. “Pollution” means an impairment of the quality of the potable water to a degree which does not create a hazard to the public health but which does adversely and unreasonably affect the aesthetic qualities of such potable waters for domestic use. Also defined as “low hazard.”

40. “Potable water” means water which is satisfactory for drinking, culinary, and domestic purposes and meets the requirements of the state Department of Health.

41. “Program Administrator” shall be the individual who oversees compliance of the program and staff.

42. “Program Manager” shall be the individual who oversees the day to day operations of the program.

43. “Project Manager” shall be the individual who oversees the processes of the program work effort.

44. “Reduced pressure principle backflow prevention assembly” means a backflow prevention assembly consisting of two independently acting internally loaded spring check valves, a differential pressure relief valve, four properly located test cocks, and two isolation valves.

Commonly referred to as an RP or and RPZ.

45. "Sewage" means any liquid waste containing animal or vegetable matter in suspension or solution and may include liquids containing chemicals in solution.

46. "Shall" The word "shall" is a mandatory term.

47. "Table 609.F.5" refers to the table marked 609.F.5 in LAC Title 51, Part XIV (Known as the Containment table)

48. "Table 609.F.6" refers to the table marked 609.F.6 in LAC Title 51, Part XIV (Known as the Fixture Isolation table)

49. "Water service" Depending on the context, "water service" means the physical connection between a public water system and a customer's building, property, or private water system, or the act of providing potable water to a customer.

50. "Water supply system" means the water supply system of a building or premises consisting of the building supply pipe, the water distributing pipes and the necessary connecting pipes, fittings, control valves, and all appurtenances carrying or supplying potable water in or adjacent to the building or premises.

51. "Water Purveyor" means SWBNO.

Sec. XX.X. Administrative Authority.

(a) The Water Purveyor shall have the right to enter, with the consent of the customer, or upon the basis of a suitable warrant having probable cause issued by a court of appropriate jurisdiction any property to inspect

for cross connections.

(b) The State of Louisiana will approve training programs for “backflow prevention assembly technicians” and register “backflow prevention assembly technicians” who successfully complete a training program approved by the State Plumbing Board of Louisiana as per LA. R.S. 37:1367(G) and LAC 46:LV.310, all of which applies to licensed plumbers.

In addition, the State Health Officer, through the Title 51, Part XII, does accept certain persons as “general testers” per Section 346 thereof. Such individuals are known and defined herein as “backflow prevention assembly general testers”. The limitations of jurisdiction/authority of “backflow prevention assembly general testers” are described within said definition.

(c) The Administrative Authority may collect a fee as per the SWBNO Schedule of Inspection Fees for each inspection done by the Water Purveyor. The inspection will only be for the water purveyor to make sure that the air gap or backflow prevention assembly is in place and is the proper cross connection control device or method used in accord with Table 609.F.5 and Table 609.F.6 (LAC Title 51, Part XIV).

(d) The Administrative Authority and the Water Purveyor shall maintain records of cross connection hazard surveys, and the installation, testing, and repair of all backflow prevention assemblies installed for containment and isolation purposes.

(e) Notwithstanding anything herein to the contrary, the Administrative Authority and Water Purveyor are authorized to take additional actions which may not be specifically covered herein that are deemed necessary to protect SWBNO’s water supply from potential or actual cross connections in accord with the requirements.

Sec. XX.X. Water Services.

A. New water services.

1. Plans shall be submitted to the Water Purveyor for review on all new water services in order to determine the degree of hazard.
2. The water purveyor shall approve the type of backflow prevention assembly or method required for containment based on the requirement of Table 609.F.5/F.6 and degree of hazard. If a cross connection is not listed in Table 609.F5/F.6, the Water Purveyor shall use Table B1 of the “Manual for the Selection, Installation, Maintenance, and Field Testing of Backflow Prevention Devices” (CAN/CSA Standard B64.10-1994) as a guide to determine the type of device to require.
3. The Water Purveyor shall require the installation of the appropriate backflow prevention assembly or method for containment before the initiation of water service.
4. An approved backflow prevention assembly for containment as defined in this ordinance may be required to be installed at the domestic water service entrance as a condition of service to all newly constructed or remodeled commercial buildings. For the purposes of this ordinance, any upgrade to an existing service line is deemed a new service.
5. All commercial, multi-tenant properties served by one water meter are deemed to have a potential for cross connections to non-potable or hazardous substances because the City does not have control of tenants changing in this type of facility.

B. Existing water service.

1. Any changes of, or additions to, existing water services shall be treated as new water services for the purpose of this ordinance.
2. Within six (6) months after adoption of this ordinance, the Administrative Authority shall publish and make available to each customer a copy of the standards used to determine the degree of hazard.

3. Each customer shall be surveyed and shall report to the Water Purveyor if cross connections exist and the degree of hazard. Upon a finding of hazard, the customer shall cause the appropriate backflow prevention assembly or method to be installed within 60 days of discovery.
4. For existing water services, the Water Purveyor may inspect the premises to determine the degree of hazard. If a high hazard is determined to exist, backflow prevention for containment is required and the installation of an approved reduced pressure zone backflow prevention assembly at the service entrance must be completed within 30 days of discovery of the high hazard to avoid termination. This shall be ordered by written notice through U.S. mail, email or hand delivery. (the "Installation Notice").
5. Failure of the Water Purveyor to notify a customer that the customer has a high hazard cross connection and should install backflow prevention assemblies or methods for containment in no way relieves the customer of the responsibility to comply with all requirements of this section.
6. An approved backflow prevention assembly for containment may be required to be installed at the water service entrance in any existing service where an actual or potential cross connection to non potable or hazardous substances exists, is created, or is identified by the Water Purveyor.
7. Where harmful contaminants or pollutants are used with any device or process connected to the water system, the customer must install and maintain a USC Approved testable reduced pressure principle backflow prevention assembly (RP) at the water service entrance in accordance with these ordinances and any applicable plumbing code requirements.

Sec. XX.X. Customer Duties.

- (a) The customer shall be responsible for ensuring that no cross connections exist without approved backflow protection within the customer's premises starting at the point of service from the public potable water system.
- (b) The customer shall, at the customer's own expense, cause installation, operation, repair, testing and maintenance of the backflow prevention assemblies required by the Administrative Authority. The customer shall advise the water purveyor in advance of when a device is to be tested to allow the water purveyor the opportunity to witness the test.
- (c) Within ten (10) days after testing and/or repairs are completed, the customer shall provide the Administrative Authority with copies of records of the installation and of all tests and repairs made to the backflow prevention assembly on a form provided by the Administrative Authority. The Administrative Authority may require that the customer records (i.e.; test reports) be input directly into the Administrative Authority's recordkeeping application.
- (d) In the event of a backflow incident, the customer shall immediately notify the Water Purveyor of the incident and take steps to confine the contaminant or pollutant. Water service will not be restored until corrective action is taken and approved after inspection by the Water Purveyor.
- (e) In accordance with Section 312.10.3 of 2021 IPC LA amended, the customer shall maintain records of installations, tests, repairs, overhauls, or replacements of backflow prevention devices or methods for at least 5 years and, upon request, such records shall be made available to the Administrative Authority.

Sec. XX.X. Requirements.

A. Water Purveyor requirements:

1. For premises existing prior to the start of this program, the Water Purveyor will perform evaluations and inspections of plans and/or premises and inform the customer by letter of any corrective action deemed necessary, the method of achieving the correction, and the time allowed for the correction to be made (60 days). Ordinarily, sixty (60) days will be allowed; however, this time period may be shortened depending upon the degree of hazard involved and the history of the device(s) in question.

2. The Water Purveyor will not allow any cross connection to remain unless it is protected by an approved backflow preventer or an air gap (refer to Section 14 of the Code) for which a permit (refer to Section 3.9 of the Code) has been issued and which will be regularly tested to insure satisfactory operation.

3. The Water Purveyor shall notify the Customer by letter of any failure to comply immediately following the initial evaluation. In the event the Customer fails to comply with the necessary correction by the time period described above, the Water Purveyor will notify the Customer by letter that the water service to the Customer's premises will be terminated within ten (10) days from the customer's receipt of such letter. In the event that the Customer informs the Water Purveyor of extenuating circumstances as to why the correction has not been made, a time extension may be granted by the Water Purveyor but in no case will exceed an additional thirty (30) days.

4. Notwithstanding anything to the contrary, if the Water Purveyor determines at any time that a serious threat to the public health exists, the Water Purveyor shall exercise the right to immediately terminate water service.

5. The Water Purveyor shall have on file a list of Private Contractors (Approved Plumber's) who are certified backflow device testers and/or repairers and installers. All charges for these tests, repairs, installs, etc., will be paid by the owner of the building or property.

B. Customer requirements:

1. The Customer shall be responsible for the elimination or protection of all cross connections on his premises.
2. The Customer, after having been informed by a letter from the Water Purveyor, shall at his expense, install, maintain, repair, and test or have tested, any and all backflow prevention devices or methods on their premises.
3. The Customer shall correct, within ten (10) days, any malfunction of the backflow prevention assembly or method which is revealed by periodic testing.
4. The Customer shall inform the Water Purveyor of any proposed or modified cross connection and also of any existing cross connection of which the Customer is aware but has not been found by the Water Purveyor.
5. The Customer shall not install a bypass around any backflow prevention assembly or method unless there is a backflow prevention assembly or method of the same type on the bypass. Customers who cannot shut down operation for testing of the assembly(s) or method(s) must supply additional assemblies or methods necessary to allow testing to take place. i.e., a parallel installation.
6. The Customer shall install backflow prevention assemblies or methods in a manner approved by the Water Purveyor and in conformance with the installation requirements of Section 608.13 of the 2021 IPC LA amended. In addition, devices having an atmospheric port or discharge shall be installed such that the port or discharge point is located at least 12 inches above the highest flood level which may have occurred in the previous 10-year period.
7. The Customer shall install only backflow prevention assemblies or methods approved by the Water

Purveyor.

8. Any Customer having a private well, auxiliary water supply or other private water source (refer to Section 13.14 of the Code), must have a permit if the well, auxiliary water supply or source is cross connected to the Water Purveyor's system. Permission to cross connect may be denied by the Water Purveyor. If customer have a private well, auxiliary water supply or private water source that may be cross connected to the Water Purveyor's system, customer will be required to install and maintain a reduced pressure principle assembly at the service entrance on the Water Purveyor system side.

9. In the event the Customer installs plumbing to provide potable water for domestic purposes which is on the Water Purveyor's side of the backflow prevention assembly or method, such plumbing must have its own backflow preventer installed.

10. The Customer shall be responsible for the payment of all fees for permits, annual or semi-annual device or method testing, re-testing in the case that the assembly or method fails to operate correctly, and second re-inspections for noncompliance with the Water Purveyor's requirements. The Customer shall also be responsible for the cost of any potential late-fees or fines associated with not installing required backflow preventers, not repairing malfunctioning assembly on time, and not submitting annual tests before the designated due date.

Sec. XX.X. Required backflow prevention assemblies or methods for containment.

A. Water Service Assemblies:

An air gap or an approved reduced pressure principle backflow prevention assembly is required for water services having one or more potential cross connections which the Administrative Authority classifies as high hazard.

B. Fire Protection System Assemblies:

1. All proposed installations of fire suppression systems shall be reviewed by the Plumbing Department to determine the appropriate type of backflow prevention assembly or method required.
2. For all proposed fire suppression systems using antifreeze or other any other additives, a reduced pressure principle backflow prevention assembly shall be installed at the point of entry. The customer shall provide SWBNO with the design and chemical usage of the fire suppression system.
3. All existing fire suppression systems shall meet the requirements of Sec. xx-x above. An inspection by a fire suppression specialist shall be done to determine whether antifreeze or other additives have been utilized in the suppression system. The inspection shall be done at the expense of the customer. If it cannot be certified that antifreeze or other chemicals have been used, then a backflow prevention assembly shall be installed as prescribed by Table 608.18.1 and as approved by the Plumbing Department. Installation shall be at the expense of the customer.
4. In the event cross connections, such as those found in using auxiliary water supply systems or in providing other water additives such as foaming agents, are necessary for the proper operation of the fire suppression system, then an air gap or a reduced pressure principle backflow prevention assembly shall be installed in an approved manner.
5. Unmetered, dedicated fire lines connected to the potable water supply line shall install a detector type assembly of the required type commiserate with the degree of hazard.

C. Standard Guide for Containment and Isolation Practices:

Table illustrating SWBNO Containment Practices.

SWBNO CONTAINMENT PRACTICES	
Air Gap	

1. Fire Protection/Sprinkler System utilizing non-potable water as an alternative or primary source of water
Reduced Pressure Principle Backflow Prevention Assembly
1. Hospitals, Out-patient Surgical Facilities, Renal Dialysis Facilities, Veterinary Clinics
2. Funeral homes, Mortuaries
3. Car wash systems
4. Sewage Facilities
5. Chemical or Petroleum Processing Plants
6. Animal/Poultry Feedlots or Brooding Facilities
7. Meat Processing Plants
8. Metal Plating Plants
9. Food Processing Plants, Beverage Processing Plants
10. Fire Protection/Sprinkler Systems using antifreeze in such system (a detector type double check valve assembly is required on unmetered fire lines)
11. Irrigation/Lawn Sprinkler Systems with Fertilizer Injection
12. Marinas/Docks
13. Radiator Shops
14. Commercial Pesticide/Herbicide Application
15. Photo/X-ray/Film Processing Laboratories
16. Multiple Commercial Units served by a master meter
17. Any type of occupancy type or any other facility having one or more Single-walled Heat Exchangers which uses any chemical, additive, or corrosion inhibitor, etc., in heating or cooling medium

18. Any type of occupancy type or any other facility having one or more Double-walled Heat Exchangers which uses any chemical, additive, or corrosion inhibitor, etc., in heating or cooling medium and which does not have a path to atmosphere with a readily visible discharge
19. Restaurants/commercial kitchens
20. Premises where access/entry is prohibited
Pressure Vacuum Breaker Assembly/Spill Resistant Vacuum Breaker Assembly
1. Irrigation/Lawn Sprinkler Systems
Double Check Valve Assembly
1. Fire Protection/Sprinkler Systems (a detector type double check valve assembly is required on unmetered fire lines)
2. Two residential dwelling units served by a master meter, unless both units are located on a parcel or contiguous parcels of land having the same ownership and neither unit is used for commercial purposes. As used herein, the term “commercial purposes” means any use other than residential.
3. Three or more residential units served by a master meter
4. Multistoried Office/Commercial Buildings (over 3 floors)
5. Jails, Prisons, and Other Places of Detention or Incarceration

Table illustrating SWBNO Fixture Isolation Practices.

SWBNO FIXTURE ISOLATION PRACTICES
Air Gap
1. Cooling Tower
2. Chemical Tanks
3. Commercial Dishwashers in commercial establishments

4. Ornamental Fountains
5. Swimming Pools, Spas, Hot Tubs (reduced pressure principle backflow preventer also acceptable)
6. Baptismal Fonts
7. Animal Watering Troughs
8. Agricultural Chemical Mixing Tanks
9. Water Hauling Tank
Reduced Pressure Principle Backflow Preventers
1. Commercial Boilers
2. Air Conditioning, Chilled Water Systems
3. Air Conditioning, Condenser Water Systems
4. Pot-type Chemical Feeders
5. Swimming Pools, Spas, Hot Tubs (air gap also acceptable)
6. Irrigation/Lawn Sprinkler Systems with Fertilizer Injection
7. Photo/X-ray/Film Processing Laboratories
8. Single-walled Heat Exchangers which use any chemical, additive, or corrosion inhibitor, etc., in heating or cooling medium
9. Double-walled Heat Exchangers which uses any chemical, additive, or corrosion inhibitor, etc., in the heating or cooling medium and which does not have a path to atmosphere with a readily visible discharge
10. Room(s) or other sub-units of a premise or facility receiving water where access is prohibited
Double Check Valve Assembly
1. Food Processing Steam Kettles

2. Individual Travel Trailer Sites
3. Single-walled Heat Exchangers which do not use any chemical, additive, or corrosion inhibitor, etc., in heating or cooling medium
4. Double-walled Heat Exchangers which do not use any chemical, additive, or corrosion inhibitor, etc., in the heating or cooling medium and which does not have a path to atmosphere with a readily visible discharge
Atmospheric or Pressure Vacuum Breakers
1. Laboratory and/or Medical Aspirators
2. Flushing Rim Bedpan Washers
3. Garbage Can Washers
4. Laboratory or Other Sinks with threaded or serrated nozzles
5. Flushometer Operated Fixtures
6. Commercial Washing Machines
7. Irrigation/Lawn Sprinkler systems
8. Hose Bibbs
9. Commercial Dishwashers in commercial establishments
Pressure Vacuum Breakers/Spill Resistant Vacuum Breakers
1. Mortuary/Embalming Aspirators
2. Irrigation/Lawn Sprinkler Systems with Separate Zones

Sec. XX.X. Registration.

A. Technician Registration:

All backflow prevention assembly technicians licensed by the State of Louisiana must register with the local Administrative Authority before performing work within SWBNO. Any licensed backflow prevention assembly technician shall include his or her state registration number as well as proof of their Water Supply Protection Specialist (WSPS) endorsement on all correspondence and forms required by or associated with this ordinance.

B. General Tester Registration:

All backflow prevention assembly general testers recognized by the State of Louisiana shall present a copy of his/her testing certificate and shall register with the Administrative Authority before performing work within SWBNO.

Sec. XX.X. Non-compliance by registered technicians or general testers.

(a) The local registration of a technician or general tester may be revoked or suspended for a period of up to two (2) years for non-compliance with this ordinance.

(b) Any of the following conditions constitute non-compliance:

1. Improper testing or repair of backflow prevention assemblies or methods;
2. Improper reporting of the results of testing or of repairs made to backflow prevention assemblies or methods;
3. Failure to meet registration requirements;
4. Related unethical practices.

Sec. XX.X. Installation of backflow prevention assemblies or methods.

(a) The required backflow prevention assemblies or methods for containment shall be installed in the manner recommended by the manufacturer and in accord with the requirements of Section 608.13 of the 2021 IPC LA amended, immediately following the meter or as close to that location as deemed

practical by the Administrative Authority. In any case, it shall be located downstream of the meter and upstream from any branching or fixtures. Installation at this point does not eliminate the responsibility of the customer to protect the water supply system from contamination or pollution between the backflow prevention assembly or methods and the water main.

(b) Reduced pressure principle backflow prevention assemblies shall be installed, with the relief valve discharge pointing downward, so as to be protected from flooding. The port or discharge point shall be installed such that it is located at least 12 inches above grade.

(c) Reduced pressure principle backflow prevention assemblies or methods shall not be installed in underground vaults or pits.

(d) All backflow prevention assemblies or methods shall be protected from freezing via either insulation the assembly or employing hot boxes/thermal containers. Those devices used for seasonal services may be removed in lieu of being protected from freezing; however, the devices must be reinstalled and tested by a registered backflow prevention assembly technician prior to service being reactivated.

(e) If hot water is stored within the water supply system, thermal expansion shall be provided for when installing a backflow prevention assembly or method for containment in accordance with Section 607.3 of the 2021 IPC LA amended and P2903.4.2 of the 2021 IRC LA amended.

(f) Provisions shall be made to convey the discharge of water from reduced pressure principle backflow prevention assemblies or methods to a suitable drain through an air gap.

(g) No backflow prevention assemblies or methods shall be installed in a place where they would create a safety hazard, such as, but not limited to, over an electrical panel, or above ceiling level.

(h) If interruption of water service during testing and repair of backflow prevention assemblies or

methods for containment is unacceptable to the customer, another backflow prevention assembly or method of equivalent protection, sized to handle the temporary water flow needed during the time of testing or repair, shall be installed in parallel piping.

(i) All backflow prevention assemblies or methods shall be installed so that they are accessible for testing.

(j) Modification of approved backflow prevention assemblies is strictly prohibited. Violation of this requirement by a technician or general tester shall constitute a condition of non-compliance and may be cause for prohibition of performing work within SWBNO's water system.

Sec. XX.X. Testing of backflow prevention assemblies or methods.

(a) Testing of backflow prevention assemblies or methods shall be performed by a backflow prevention assembly technician or by a backflow prevention assembly general tester registered with the Administrative Authority. The costs of tests required in the following paragraphs shall be borne by the customer.

(b) Backflow prevention assemblies or methods shall be tested upon installation; when cleaned, repaired, or overhauled; when relocated; and at least annually. In accordance with Section 312.10.2 of 2021 IPC LA Amended, backflow prevention assemblies shall be tested in accordance with CAN/CSA Standard B64.10-1994, ASSE 5000 Series Standards, FCCCHR's "Manual of Cross Connection Control", or UFL's TREEO's "Backflow Prevention – Theory and Practice".

(c) Backflow prevention assemblies or methods which are in place, but have been out of operation for more than three (3) months, shall be tested before being put back into operation. Backflow prevention assemblies or methods used in seasonal applications shall be tested before being put into operation each season.

(d) Any backflow prevention assembly or method which fails a periodic test shall be repaired or replaced by a backflow prevention assembly technician. When water service has been terminated for non-compliance, the backflow prevention assembly or method shall be tested prior to the resumption of water service. Backflow prevention assemblies or methods shall be re-tested by a registered backflow prevention assembly technician or by a backflow prevention assembly general tester immediately after repair or replacement.

(e) SWBNO may require backflow prevention assemblies or methods to be tested at any time in addition to the annual testing requirement.

(f) The registered backflow prevention assembly technician or backflow prevention assembly general tester shall report the testing of the backflow prevention assembly or method to the customer and to the Administrative Authority within five (5) days of the test.

Sec. XX.X. Repair of backflow prevention assemblies or methods.

(a) All repairs to backflow prevention assemblies or methods shall be performed by a licensed plumber holding a special “water supply protection specialist” endorsement on his plumbing license, herein defined as “backflow prevention assembly technician”.

(b) The registered backflow prevention assembly technician or backflow prevention assembly general tester shall not change the design, material, or operational characteristics of a backflow prevention assembly or method during repair or maintenance, and shall use only original manufacturer replacement parts, if available; if not available, shall use replacement parts approved by SWBNO.

(c) The registered backflow prevention assembly technician or backflow prevention assembly general tester shall report the repair, overhaul, or replacement of any backflow prevention assembly or method to the customer and to SWBNO on the form provided by the SWBNO within five (5) days of the repair.

Sec. XX.X. Customer non-compliance.

(a) The water service may be discontinued or late fees may apply in the case of non-compliance with this ordinance. Noncompliance includes, but is not limited to, the following:

1. Refusal to allow the Administrative Authority or Water Purveyor access to the property to inspect for cross connections.
2. Removal of a backflow prevention assembly or method which has been required by the Administrative Authority.
3. Bypassing of a backflow prevention assembly or method which has been required by the Administrative Authority.
4. Providing inadequate backflow prevention when potential or actual cross connections exist.
5. Failure to install a backflow prevention assembly or method which has been required by the Administrative Authority within 60 days of being notified.
6. Failure to test and/or properly repair a backflow prevention assembly or method as required by the Administrative Authority within 30 days of due date.
7. Failure to comply with the requirements of this ordinance.

Sec. XX.X. Penalty for violation.

1. Failure to have backflow assemblies tested upon installation and by the annual test due date and a report thereof to be received by the Administrative Authority may result in a non-compliance fee being charged on the customers water bill. This charge may occur monthly until a passing test report has been received by the Administrative Authority.
2. If, after three (3) months of being charged a monthly non-compliance fee, the customer has not submitted a test report, or if the customer refuses to comply with the state regulations and the rules of this code, the Administrative authority shall exercise the right to terminate water service to the property. Water service may not be reestablished until a state registered backflow technician notifies the Water Superintendent of the scheduled test date.