

Nuevo Water Company

**ORDINANCE V
CROSS-CONNECTION CONTROL PROGRAM**

May 27, 2025

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1.0 INTRODUCTION

Nuevo Water Company (NWC), owns and operates the Potable Water distribution system which provides Potable Water to customers within the NWC's service area. The potable water produced by NWC complies with all federal, state, and local regulations for safe drinking water.

2.0 PURPOSE

The purpose of this Ordinance is to provide for the protection of the Potable Water distribution system in accordance with applicable federal, state, and local regulations.

3.0 POLICY

NWC is dedicated to protecting the Potable Water distribution system by implementing a cross-connection control program ("Cross-Connection Control Program")

4.0 INTENT

It is the intent of the Cross-Connection Control Program to protect the Potable Water distribution system through the elimination of Cross-Connections between potable and non-potable sources. Cross connections may be physically eliminated or protected through the installation of approved Backflow Prevention Assemblies.

5.0 SCOPE

The Potable Water distribution system, from the point of entry to the last customer tap, consists of two elements: (a) those facilities owned and operated by NWC and (b) those facilities owned and operated by the customer. NWC is responsible for the elimination of Cross-Connections at the facilities and distribution systems owned and operated by NWC. The customer is responsible for protection from cross-connections at facilities owned and operated by the customer.

6.0 DEFINITIONS

Accessible: When referring to a Backflow Prevention Assembly, capable of being reached for testing and maintenance.

Air Gap Separation ("AG"): Air-gap separation ("AG"): A physical vertical separation of at least two (2) times the effective pipe diameter between the free-flowing discharge end of a potable water supply pipeline and the flood level of an open or non-pressurized receiving vessel, and in no case less than one (1) inch.

Authorized Backflow Prevention Assembly Tester ("Tester"): Any person who has a current backflow assembly tester certification from the Riverside County Health Department and has met the NWC Requirements and Orientation Program for Backflow Prevention Assembly Testers, as outlined in Section 8.4 of this Ordinance.

Approved Water Supply: A water source that has been approved by the State Water Board for domestic use in a public water system and designated as such in a domestic water supply permit issued pursuant to section 116525 of the CHSC.

Auxiliary Water Supply: A source of water, other than an approved water supply, which is either used or equipped, or can be equipped, to be used as a water supply and is located on the premises of, or available to, a water user.

American Water Works Association (AWWA) Standard: An official standard developed and approved by AWWA.

Backflow: An undesired or unintended reversal of flow of water and/or other liquids, gases, or other substances into a public water system's distribution system or approved water supply.

Backflow Prevention Assembly(ies) ("BPA"): A mechanical assembly designed and constructed to prevent backflow, such that while in-line it can be maintained and its ability to prevent backflow, as designed, can be field tested, inspected and evaluated. An approved BPA is any backflow prevention assembly that is found on the current list of approved Backflow Prevention Assemblies maintained by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research ("USC FCCC"), for an application. A link to the list of USC Backflow Prevention Assemblies can be found on NWC's website.

Backpressure: Any elevation of pressure in the downstream piping system (by pump, elevation of piping, steam pressure, etc.) above the supply pressure at the point of consideration which would cause, or tend to cause, a reversal of the normal direction of flow.

Backsiphonage: A form of Backflow due to a reduction in system pressure which causes a sub-atmospheric pressure to exist at a site in the water system. An indirect Cross-Connection is a Cross-Connection which is subject to backsiphonage only.

Best Management Practices for Backflow Prevention Assembly Tester ("BMPs"): The current document prepared by NWC, and updated from time to time, providing a guideline for the practice of NWC-accepted BPA Testers.

Cross-Connection Control Policy Handbook: The primary objective of the Cross-Connection Control Policy Handbook (CCCPH) is the protection of public health through the establishment of standards intended to ensure a public water system's (PWS) drinking water distribution system will not be subject to the backflow of liquids, gases, or other substances. In addition, by providing basic educational information on backflow prevention, the State Water Resources Control Board (State Water Board) intends to build a foundation of awareness within the regulated community regarding the importance of backflow protection and cross-connection control, leading to the implementation of a robust cross-connection control program for PWSs.

Contaminant: Any substance that may impair the quality of water in such a way as to create an actual hazard to the public health. A contaminant is also referred to as a "Health Hazard."

Contamination: An impairment of the Potable Water supply which creates an actual hazard to the public health. Contamination is also referred to as a "Health Hazard."

Critical Service: A water service that can never be interrupted due to the critical nature of the facility involved.

Cross-Connection: A cross-connection is an interconnection between a potable water supply and a non-potable source via any actual or potential connection or structural arrangement between a PWS and any source or distribution system containing liquid, gas, or other substances not from an approved water supply. Bypass arrangements, jumper connections, removable sections, improperly installed swivel or change-over devices, and other temporary or permanent devices through which, or because of which, backflow can occur are considered to be cross-connections. The CCCPH includes acceptable installation criteria for swivel-ell and other types of backflow prevention assemblies (BPAs) to prevent backflow.

a. High Hazard Cross-Connection: A cross-connection that poses a threat to the potability or safety of the public water supply. Materials entering the public water supply through a high-hazard cross-connection are contaminants or health hazards. See Appendix D for some examples.

b. Low Hazard Cross-Connection: A cross-connection that has been found to not pose a threat to the potability or safety of the public water supply but may adversely affect the aesthetic quality of the potable water supply. Materials entering the public water supply through a low-hazard cross-connection are pollutants or non-health hazards.

Cross-Connection Control Program Coordinator: The PWS must designate at least one individual involved in the development of and be responsible for the reporting, tracking, and other administration duties of its cross-connection control program. For PWS's with more than 3,000 service connections, the Cross-Connection Control Program Coordinator must be a cross-connection control specialist.

Cross-Connection Control Specialist: An individual who is authorized to perform Site Surveys on behalf of NWC for the purpose of identifying Cross-Connections and determining Degree of Hazard. The individual shall be certified by the California-Nevada section of the AWWA or an organization with equivalent certification requirements. The State Water Board requires the provision of at least one person trained in cross-connection control to implement and administer the cross-connection program. This person may be on staff for NWC or conduct business as a contracted consultant.

Degree of Hazard: The evaluated level of risk that a premise poses to the Public Potable Water System as either a Pollutant (Non-Health Hazard) or Contaminant (Health Hazard): Derived from the assessment of the materials, which may come in contact with the distribution system through a Cross-Connection.

NWC Fees: Fees as approved by NWC Board of Directors.

NWC Tester List: A list maintained by NWC of BPA Testers who are certified by the Riverside County Department of Environmental Health and have complied with the requirements set forth by NWC in this Ordinance.

Double Check Valve Backflow Prevention Assembly ("DC"): An assembly composed of at least two independently acting, approved check valves, including tightly closing resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. This assembly shall only be used to protect against Pollutants.

Double Check Detector Backflow Prevention Assembly ("DCDA"): A specifically designed assembly composed of a line-size approved double check valve assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately for only up to 2 gallons per minute ("gpm") and shall show a registration for all rates of flow. This assembly shall only be used to protect against Pollutants. The DCDA is primarily used on fire sprinkler systems.

Double Check Detector Backflow Prevention Assembly-Type II ("DCDA-II"): A specially designed assembly composed of a line-sized approved double check valve assembly with a bypass around the second check containing a specific water meter and a check valve. The meter shall register accurately for rates of flow up to 2 gpm and shall show a registration for all rates of flow. This assembly shall only be used to protect against Pollutants. The DCDA-II is primarily used on fire sprinkler systems.

Flow-Through Fire System: A fire system that does not have a fire department pumper connection. They are constructed of approved Potable Water piping and materials to which sprinkler heads are

attached. The system terminates at a connection to a toilet or other plumbing fixture to prevent the water from becoming stagnant.

Graywater: Untreated wastewater which has not been contaminated by any toilet discharge, affected by infectious, contaminated, or bodily wastes, and which does not present a threat from Contamination by processing, manufacturing, or operating wastes. Graywater includes wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers.

Health Agency (Agency having the authority and jurisdiction): The State Water Resources Control Board (Water Boards) or Division of Drinking Water (DDW) and the Riverside County Department of Environmental Health.

Industrial Fluids: Any chemical, biological or other fluid or solution which would constitute a Contaminant if introduced into an Approved Water Supply.

Industrial Piping System: Any system used to transmit, confine, or store any fluid, solid or gaseous substance other than an Approved Water Supply. Such a system would include all pipes, conduits, tanks, receptacles, fixtures, equipment, and appurtenances used to produce, convey, or store substances which are, or may be, Polluted or Contaminated.

Isolation Assembly: Any backflow assembly that is located downstream of the Service Protection assembly on the customer's Premises. It is the responsibility of the customer to test and maintain these Backflow Prevention Assemblies as required by Section 603.3.3 of the California Plumbing Code (current edition) and the Health Agency having jurisdiction.

Lead Free Law: Pursuant to Health and Safety Code Section 116875, if the water flowing through a backflow prevention device is ultimately provided for human consumption, the device must be lead-free. It is the responsibility of the backflow Tester and/or backflow installer to ensure that backflow assemblies installed or replaced after January 1, 2010, on water systems intended for human consumption and culinary purposes meet the requirements of the Lead-Free Law.

Lead Free: California Health and Safety Code, Section 116875 defines "Lead Free" as "not more than 0.2 percent lead when used with respect to solder and flux and not more than a weighted average of 0.25 percent when used with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures."

Non-Potable Water: Water that is not acceptable for human consumption as determined by federal, state, and local drinking water standards.

Parallel Installation: Two or more Backflow Prevention Assemblies of the same type having common inlet, outlet, and direction of flow.

Person: An individual, corporation, company, association, partnership, municipality, public utility, or other public body or institution.

Pollutant: Any substance which may cause or contribute to aesthetically objectionable conditions, such as those which alter the color or odor of water. A Pollutant is considered a non-health hazard.

Pollution: An impairment of the quality of the 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 waters for domestic use.

Potable Water: Water from a source which has been investigated and approved for human consumption by the Health Agency having jurisdiction.

Premises: Any area within a customer's property which is served or has the potential to be served Potable Water by the NWC.

Pressure: A uniform force applied over a surface, measured as a force per unit area. Typically, water pressure is measured in pounds per square inch ("PSI") or pounds per square inch differential ("PSID").

Program Fees: Fees that are NWC Board Approved for administration, fines or labor associated with NWC's Cross-connection/Backflow Program. Found in the NWC's Schedule of Fees and Charges.

Public Potable Water System: Any publicly or privately-owned water system operated as a public utility under a valid health permit to supply water for domestic purposes. This system includes all sources, facilities and appurtenances between the source and the Point of Delivery such as valves, pumps, pipes, conduits, tanks, receptacles, fixtures, equipment, and appurtenances used to produce, convey, treat, or store Potable Water for public consumption or use.

Raw Water: Non-Potable Water from a supply source prior to potable treatment.

Recycled Water: Non-Potable Water available from Recycled Water facilities, which may include a combination of treated wastewater, intercepted surface and subsurface stream flows, groundwater and other waters including Potable Water.

Reduced Pressure Principle Backflow Prevention Assembly ("RP"): An assembly containing at least two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and below the first check valve. The unit shall include properly located resilient seated test cocks and tightly closing resilient seated shutoff valves at each end of the assembly. This assembly is designed to protect against a Pollutant or Contaminant. This assembly shall not be used for Backflow protection of sewage.

Reduced Pressure Principle Detector Assembly ("RPDA"): A specially designed assembly composed of a line-size approved Reduced Pressure Principle Backflow Prevention Assembly with a specific bypass around the second check valve containing a specific water meter, and an approved check valve. The meter shall register accurately for rates of flow up to 2 gpm and shall show a registration for all rates of flow. This assembly shall be used to protect against a Pollutant or Contaminant. The RPDA II is primarily used on fire sprinkler systems.

Riverside County Department of Environmental Health: The agency which certifies Backflow prevention assembly testers, also having jurisdiction to regulate onsite Cross-Connection control in Riverside County (Except where Recycled Water is onsite).

Service Connection: The terminal end of a connection from the Public Potable Water System, where it connects to the customer's water system and the Water Purveyor loses jurisdiction and sanitary control of the water, at the point of delivery to the consumer's water system. If a water meter is installed at the end of the Service Connection, then the Service Connection shall be the downstream end of the water meter.

Service Protection: The appropriate type or method of Backflow protection located at the customer's Water Service Connection, which shall be commensurate with the Degree of Hazard posed to the Public Potable Water System.

Sewage: Sewage is domestic, municipal, or industrial waste products or Recycled Water.

Sewer: The pipes that carry sewage.

Site Surveys ("Hazard Assessments"): Hazard Assessment of a user's premises designed to evaluate the types and degrees of hazard at a user's premises.

State Water Resources Control Board (Water Board or Division of Drinking Water or DDW): The State Water Resources Control Board covers California Water quality, rights, regulations, laws, and funding. The mission of the "Water Board" is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables the Water Board to provide comprehensive protection for California's waters.

Used Water: Any water supplied by a Water Purveyor from a Public Potable Water System to a Consumer's Water System after it has passed through the Service Connection and is no longer under the control of the Water Purveyor.

Water Theft: Unauthorized water use from a fire hydrant, metered connection, unmetered connection, or an unapproved connection other than for fire suppression is considered a crime.

Water Purveyor: The public or private owner or operator of the Potable Water system supplying an Approved Water Supply to the public. In this case, NWC.

Water Supervisor: The person designated by the Water User to be responsible for installation, operation and maintenance of the water pipelines, systems on the Water User's premises.

Water User: Any person obtaining water from NWC. Also referred to as "customer" or "Responsible Owner."

7.0 REQUIREMENTS

7.1 GENERAL REQUIREMENTS

A PWS must comply with the requirements of the CCCPH.

Program for Public Water System Cross-Connection Control: PWS must protect the public water supply through implementation and enforcement of a cross-connection control program. Unless otherwise specified by this Chapter or directed by the State Water Board, a PWS may implement its cross-connection control program, in whole or in part, either directly or by way of contract or agreement with another party. The PWS, however, shall not be responsible for abatement of cross-connections which may exist within a user's premises. The cross-connection control program must include at a minimum the following elements:

Operating Rules or Ordinances: Each PWS must have operating rules, ordinances, by-laws or a resolution to implement the cross-connection program. The PWS must have legal authority to implement corrective actions in the event a water user fails to comply in a timely manner with the PWS's provisions regarding the installation, inspection, field testing, or maintenance of BPAs required pursuant to this Chapter. Such corrective actions must include the PWS's ability to perform at least one of the following:

- (a) deny or discontinue water service to a water user,
- (b) install, inspect, field test, and/or maintain a BPA at a water user's premises, or
- (c) otherwise, address in a timely manner a failure to comply with the cross-connection control program.

The following are non-exhaustive examples of potentially hazardous conditions which require a BPA:

- Premises where substances are harmful to health are handled in a manner which could permit their entry into the Public Potable Water System.
- Premises having an Auxiliary Water Supply.
- Premises that have internal Cross-Connections.
- Premises where Cross-Connections are likely to occur, and entry is restricted.
- Premises having a repeated history of Cross-Connections being established or re-established.
- Premises with complex piping systems (complexity is determined by an inspection of the premises by a Cross-Connection Control Specialist).
- Premises with Potable Water in addition to Non-Potable Water Systems.
- Premises where a customer has more than one Service Connection.
- Premises where there is a condition that creates a potential hazard to the Public Potable Water System.

8.0 RESPONSIBILITY

8.1 PROGRAM PURPOSE

NWC's Cross-Connection Control Program is intended to eliminate and/or protect Cross-Connections at NWC-owned facilities and NWC-owned Potable Water distribution system from

contaminant or pollutant sources. In addition, the protection of the Potable Water distribution system is accomplished through the installation of Approved BPAs at the customer's Service Connection, in accordance with Water Board's Cross-Connection Control Policy Handbook (CCCPH) and the NWC Approved BPAs must be installed in accordance with NWC specifications and this Ordinance. If NWC determines that there are potential or actual Cross-Connections on the customer's property, the customer must install and maintain the BPAs at no cost to NWC as a condition to obtaining water service from NWC.

NWC's Cross-Connection Control Program is intended to provide for the following:

- The adoption of operating rules or ordinances to implement the Cross-Connection program.
- The conducting of Surveys to identify customer premises where Cross-Connections are likely to occur.
- The provisions of Backflow protection by the Water User at the Water User's connection or within the Water User's premises or both.
- The provision of at least one person trained in Cross-Connection control to carry out the Cross-Connection Program.
- The establishment of a procedure or system for testing BPAs.
- The maintenance of records of locations, tests, and repairs of BPAs, for a minimum of three years.
- Fees associated with administering the Cross-connection/Backflow Program.

8.2 NUEVO WATER COMPANY RESPONSIBILITIES

NWC will supply the customer with the NWC Tester List. Only Testers who appear on NWC's List are accepted by the NWC to test, maintain, and repair BPAs within the NWC's service area.

NWC personnel will provide an orientation session to backflow assembly Testers who wish to be placed on NWC's Tester List.

When a meter protection BPA is not tested by the due date, NWC will consider this a potential Contamination hazard to the NWC's Potable Water distribution system. Consequently, the customer will be notified as specified in this section of this Ordinance, and if backflow assembly testing is not performed, NWC will discontinue water service until testing is complete and satisfactory to NWC, and the test form is received by NWC.

NWC reserves the right for qualified personnel to test meter protection BPAs after the BPA has been tested by a Tester on NWC List. This testing provides an element of quality assurance for the NWC's Cross-Connection Control Program. Quality assurance testing performed by NWC under this sub-section will be at NWC's cost.

8.3 CUSTOMER RESPONSIBILITY

The customer is responsible for preventing Contaminants or Pollutants from entering the Public Potable Water system from customer's Premises and preventing Cross Connections on the customer's premises.

The customer's water system shall be made accessible for a Site Evaluation at a designated time agreed to by the customer and a NWC representative.

If a cross-connection or potential cross-connection has been found on the premises, the customer shall remedy the cross connection or potential cross connection with the guidance

and inspection of the NWC Cross-connection Specialist or install a BPA per the applicable NWC Standard Drawing. If a customer's Service Connection BPA is stolen or removed, the theft or removal of the BPA must be reported to NWC immediately. If the site has been documented as having potential Contaminants, the water service shall be shut off and remain shut off until the BPA is replaced. The installation of any piping configuration other than an approved BPA shall be considered a violation and will result in water service termination. If the site has been documented as having potential Pollutants, the customer shall have ten (10) working days to replace and test the BPA. After ten (10) working days, the water service will be terminated.

Any unauthorized removal or relocation of a Service Protection BPA will be considered a violation and will result in water service disconnection.

A change of ownership or name change, or type of use or potable system piping may require an On-Site Survey by NWC personnel.

The customer must use a Tester which is on the current NWC List.

The customer must ensure that the BPA test report is received by NWC by the due date listed on the BPA test form.

The customer is responsible for all fees as outlined in Nuevo Water Company's Schedule of Fees and Charges.

8.4 BACKFLOW ASSEMBLY TESTER RESPONSIBILITY

It is the Tester's responsibility to abide by this Ordinance and to follow all of the NWC's Best Management Practices for Backflow Assembly Testers.

To be considered for placement on NWC's List the following must be submitted to the NWC's Cross-Connection Specialist:

- A copy of the current Riverside County Health Department's Backflow Prevention Assembly tester certification.
- Attendance at an NWC orientation for Backflow Prevention Assembly testers.
- A signed orientation checklist acknowledging adherence to this Ordinance and NWC's BMPs.

To remain on NWC's List, the following must be submitted to the Cross-Connection Specialist:

- A copy of the current Riverside County Department of Environmental Health tester certification and is required every three (3) years upon renewal.
- The Tester is required to calibrate field test gauge(s) at least annually and to re-calibrate whenever a gauge is inaccurate by more than +/- 0.2 PSID. Test gauge calibration must be verified against a reference source that is traceable to the National Institute of Standards and Technology.
- The Tester must retain proof of test gauge calibration and send copies to NWC.
- NWC reserves the right to require a copy of a test gauge calibration certificate during quality check proceedings and at any time deemed reasonable to NWC.

If a copy of the current BPA Tester's certification is not received within one calendar month of the expiration date, the tester will be removed from the NWC's List. Any BPA test reports

received from a Tester who has been removed from the NWC List will be considered invalid and returned to the customer.

Removal from NWC's List:

- Failure to comply with this Ordinance or NWC's BMPs will result in disciplinary action by NWC, in accordance with the procedures outlined in the BMPs.
- If the Riverside County Department of Environmental Health removes a Tester from the County Tester list, that Tester will be immediately removed from the NWC List and will not be permitted to test, repair, or maintain BPAs within NWC's service area, until the Tester is recertified by the Riverside County Department of Environmental Health and approved by NWC.

9.0 WATER SYSTEM HAZZARD ASSESSMENT (SITE SURVEY)

9.1 HAZARD EVALUATION

NWC may require and conduct inspection(s) of premises to evaluate on-site Cross-Connection hazards. This Site Survey will determine the degree of hazard(s) on the customer's site that may have a negative impact to NWC's Potable distribution system. The Site Survey will also determine the type of BPA required by applicable State and local regulations and this Ordinance. NWC may require that the BPA(s) be tested more than once a year based on the Degree of Hazard presented by the customer's water system. If access to the customer's water system is denied, the highest level of Backflow prevention shall be required, and service will be suspended until meter protection has been installed and approved by NWC.

10.0 SERVICE PROTECTION

10.1 NEW SERVICE REVIEW PROCESS

An assessment of all new water service applications will be made to determine the type of Backflow prevention required, if any. If a BPA is necessary, the customer is required to install the BPA at customer's own expense in accordance with NWC's approved standards, BMPs and this Ordinance. The first backflow assembly test upon initial installation will be performed by "NWC personnel or NWC approved contracted Tester" and charged to the water customer's bill. Subsequent tests may be performed by persons on the "NWC Backflow Prevention Testers List."

10.2 REQUIREMENTS FOR WATER SERVICE PROTECTION

Reduced Pressure Principle Backflow Prevention Assembly ("RP")

No water service connection to any premises shall be installed by NWC unless the water service is protected as required by applicable statute and/or associated regulations including this Ordinance. Water service to any premises shall be discontinued by NWC if the BPA' required by applicable state and local regulations and this Ordinance is not installed, tested, and maintained, if the BPA has been removed, bypassed, or altered, or if the customer or its tenant(s), agent(s), or representative(s) refuses to permit NWC access to the Premises to reasonably inspect water service protection mechanisms. Water service will not be restored until such conditions or defects are corrected to the satisfaction of NWC.

An RP is required for all instances of Service Protection per NWC approved standard drawings; however, at the customer's request NWC may perform a Cross-Connection control survey to determine if a lower level of protection may be acceptable.

Water service protection is required in, but not limited to, conditions where:

- Premises having an Auxiliary Water Supply. (All wells that have not been properly abandoned or destroyed are considered an Auxiliary Water Supply).
- Premises having a booster pump that is located on a customer's Potable Water system.
- Premises having chemicals or fertilizers that are applied by injection in the customer's Potable Water system.
- Premises that have a fire suppression system that uses black iron pipe, chemical additives, booster pumps, or storage tanks.
- Premises that have a fire system with a storage tank or booster pump.
- Premises that have dual-plumbed or dual-sourced Recycled Water, Non-Potable Water, or Graywater systems.
- Premises where a commercial or residential business is being operated that may pose a Contamination risk to the Public Potable Water System.
- Premises that have a Remote Service and it is determined through a site survey that a BPA is needed.
- Premises that have looped potable service piping with more than one point of connection to the NWC's main distribution system. In this situation, Backflow protection is required on both services.
- Premises where Cross-Connections are likely to occur.
- Premises where an owner denies access to the property for inspection by authorized NWC personnel.

Note: When a site is dual-plumbed or dual-sourced with Recycled Water, Cross-Connection testing will also be required, at the customer's expense.

10.3 COMMERCIAL AND INDUSTRIAL WATER SERVICE PROTECTION

Reduced Pressure Principal Backflow Prevention Assembly ("RP")

All new commercial and industrial sites are required to install RPs. All sites determined by NWC to present an actual or potential hazard to NWCs Potable Water distribution system are required to install RPs at the Potable Water service meter(s). Commercial, industrial, and government sites are examples of facilities that require Backflow protection at the Potable Water service meter. In certain circumstances where there is low water pressure to the site, the site will be evaluated by a NWC Cross-Connection Control Specialist to determine if a double check assembly in lieu of an RP would be acceptable to NWC.

10.4 AGRICULTURAL AND LANDSCAPE WATER SERVICE PROTECTION

Reduced Pressure Principal Backflow Prevention Assembly ("RP")

All new and existing agricultural and landscape sites are required to install RPs at the Potable service meter(s). Agricultural and landscape irrigation systems are subject to exposure to fertilizers, pesticides, fecal material, and various other chemical and biological Contaminants. Agricultural and landscape sites may contain Auxiliary or Non-Potable Water sources, booster pumps, wells, chemical aspirators, and other conditions that represent a hazard to the Public Potable Water System.

10.5 RESIDENTIAL WATER SERVICE PROTECTION

Reduced Pressure Principal Backflow Prevention Assembly ("RP")

Water service protection requirements apply to private residential water services when any of the above listed hazards are on the premises. Any questions about the following requirements should be directed to NWC's Cross-Connection Specialist.

10.6 RESIDENTIAL FIRE SERVICE PROTECTION

Double Check Valve Backflow Prevention Assembly ("DC")

Residential water service to a fire sprinkler system shall be installed per NWC approved standard drawings and require the signing of a "hold harmless agreement" through NWC office management. Service Protection shall be required in the form of an approved double check backflow prevention assembly or an approved RP backflow assembly if there is a high hazard on site

All Residential Fire Sprinkler customers must submit updated plans for NWC review. Plans must show that the Fire Sprinkler System does not carry any type of chemical additive. If plans do not specifically show that no chemical additive is applied, then NWC will require a letter from the contractor/developer, stating that the designed fire sprinkler system carries no chemical additive.

Fire systems are recommended to be a flow-through design to prevent stagnation of water in the system.

Reduced Pressure Principal Backflow Prevention Assembly ("RP")

Residential fire sprinkler systems that contain chemical additives or a possible contaminant will require an RP as Service Protection per NWC approved standard drawings.

Residential Remote Water services will be installed per NWC approved Specs to serve separate domestic and fire sprinkler systems and shall be installed per NWC approved standard drawings. Each remote service will be reviewed for proper installation and a determination will be made if backflow protection shall be required in the form of an RP per NWC drawings.

Note: On premises that require Service Protection for on-site hazards, both domestic and fire branches of the service will require an RP to be installed.

10.7 FIRE SUPPRESSION SYSTEM SERVICE PROTECTION

Reduced Pressure Principle-Detector Backflow Prevention Assembly ("RPDA")

Double Check Detector Backflow Prevention Assembly ("DCDA")

All new fire suppression systems shall have a hazard evaluation prior to BPA installation conducted by an authorized NWC representative.

All new wet pipe non-flow through fire sprinkler systems that pose a high health risk (i.e., containing water from auxiliary sources, antifreeze, chemicals used for corrosion control, wetting agents or other chemicals that cannot be considered as Potable) shall have an approved RPDA or an AG installed.

All new wet pipe non-flow through fire sprinkler systems that pose a low health risk, such as with a Pollutant, shall have DCDA installed per NWC approved Drawing.

When an existing wet pipe fire sprinkler system with a single detector check valve is significantly expanded or modified (requiring hydraulic analysis), the Service Protection must be upgraded to an approved DCDA. If additional hazards exist on the premises an RPDA may be required.

10.8 CONSTRUCTION SERVICE PROTECTION

Reduced Pressure Principal Backflow Prevention Assembly (“RP”)

All construction meters must be protected by an RP assembly that is provided by the contractor. The first backflow assembly test upon initial installation and/or relocation will be performed by “NWC personnel or NWC approved contracted Tester.” And the testing will be charged to the water customer’s bill. Subsequent tests may be performed by persons on the “NWC Backflow Prevention Testers List.”

- Any flushing of new water mains from a Potable Water source prior to NWC’s acceptance must be through a BPA. Any exceptions must be approved by the Water Operations Department or the Cross-Connection Specialist, prior to flushing.

10.9 POTABLE WATER HAULER LICENSE INSPECTION

Backflow Prevention Requirement: None with valid license

Bulk haulers of Potable Water are required to obtain a water hauler license through the local office of the Department of Public Health’s Food and Drug Branch.

Bulk haulers must apply through NWC for a construction meter.

The hauler’s vehicles will be inspected by NWC’s Operations personnel or Cross-connection Specialist for compliance on an annual basis and must show at the time of inspection a current Department of Public Health Food and Drug Branch license.

10.10 AIR GAP INSPECTION

Backflow Requirement

An Air Gap (AG) inspection in lieu of an RP shall be considered on a case-by-case basis and approved by the Operations Division and the Cross-Connection Specialist.

- a. The receiving water container must be located on the water user’s premises at the water user’s service connection unless an alternate location has been approved by the PWS;
- b. All piping between the water user’s service connection and the discharge location of the receiving water container must be above finished grade and be accessible for visual inspection unless an alternative piping configuration is approved by the PWS;
- c. The Public Water System must ensure that the AG specified in CCCPH section 3.3.1 (a) has been installed; and
- d. The PWS must ensure that each AG used for its Cross-Connection Control Program meets the requirements in Table 1, Minimum Air Gaps for Generally used Plumbing Fixtures, page 4 of the American Society of Mechanical Engineers (ASME) A112.1.2-2012(R2017) (See Appendix).
- e. Any new air gap installation at a user’s service connection must be reviewed and approved by the State Water Board prior to installation.

11.0 SUPERVISORS

11.1 WATER SUPERVISOR

NWC, and/or the Health Agency may, at either’s sole discretion, may require a Non-Potable Water, Recycled Water, or other Water User to designate a Water Supervisor, where the Water

User's premises have a multi-piping system that conveys various types of fluids, some of which may be hazardous; where changes in the piping system are frequently made; or where other circumstances make designation of a supervisor appropriate. The Water Supervisor shall be responsible for the prevention of Cross-Connections during the installation, operation, and maintenance of the Water User's on-site water system.

The Water User's Non-Potable Water or Recycled Water system shall have a Site Survey conducted by NWC personnel on an annual basis and whenever a change occurs. Some examples include, but are not limited to, a change of land ownership, change of lease ownership, change of potable water account owner with Nuevo Water Company, or a change of recycled water account owner with EMWD. It is the customer's responsibility to ensure that the Water Supervisor meets all the above requirements and to advise Nuevo Water Company of any changes.

12.0 RETROFITS

12.1 RETROFIT REQUIREMENTS

Following a Site Survey, NWC will notify the Responsible Owner/Water User of the results of the survey and the required corrective action, if any. If backflow protection, modification, adjustment, or any other reasonably necessary work related to the meter for the benefit of NWC's water supply or the water supply system is required, a period of thirty (30) days will be given to complete all required corrective action(s). In the interim, the customer's service may stay active unless a high-hazard condition exists onsite.

A second notice in letter form, a phone call, or a door knocker will be sent to each Responsible Owner/Water User who does not take the required corrective action prescribed in the first notice, and such corrective action is not taken within the time frame specified. Such responsible Owner/Water User may be subject to service discontinuance. All costs incurred by NWC, including administrative costs, associated with correcting the non-compliance will be charged to the Responsible Owner/Water User in accordance with fees established by NWC Board of Directors.

13.0 INSTALLATIONS – REMOVALS

13.1 INSTALLATION REQUIREMENTS FOR BACKFLOW PREVENTION ASSEMBLIES

- BPA's shall be installed according to current NWC approved specifications and standard drawings.
- RPs shall be installed per NWC approved standard drawing.
- DCDAs and RPRDAs shall be installed per NWC approved standard drawing.
- Residential fire sprinkler system Double Check Assemblies (DC) shall be installed per NWC approved standard drawing.

13.2 REMOVAL OF BACKFLOW PREVENTION ASSEMBLIES

- Customer must make this request.
- Nuevo Water Company will provide a list of requirements that must be met to allow for the removal of the Backflow Prevention Assembly.
- A Site Survey must be performed.
- The Site Survey will determine if the degree of hazard(s) on the customer's site has been removed. No Backflow Prevention Assembly may be removed unless there are no hazards

or potential conditions on, affecting, or posed by the Premises that would warrant maintaining the Backflow Prevention Assembly.

- NWC may suggest alternative ways to eliminate a cross-connection or potential cross-connection so that protection at the user connection would not be required.
- The customer will be responsible for all Nuevo Water Company fees that are associated with the removal of the Backflow Prevention Assembly. (Fees are outlined in the NWC Schedule of Fees and Charges).

14.0 WATER THEFT

Unauthorized water use from a fire hydrant, unmetered connection or unapproved connection other than for fire suppression is considered a crime.

- Rules and regulations of NWC, the State and local authorities are regularly bypassed when unauthorized use occurs.
- Chances of contamination due to a cross-connection increase when water is taken illegally.
- Increased damage to the water system can occur due to water hammer or damaged appurtenances.
- Water Theft will be prosecuted to the maximum extent possible. Fines and fees will include various fees associated with the theft as well as cross-connection costs. These costs may come from NWC, Water Boards or other responsible authorities.
- In addition, any damage arising from the water theft will also be the responsibility of the person or company alleged to be performing the illegal connection.

15.0 WATER SERVICE DISCONTINUANCE

15.1 CONDITIONS OF SERVICE DISCONTINUANCE

Shut-off procedures in Section 14.2 of this Ordinance shall be initiated when:

- Conditions posing a clear and immediate hazard to the Potable Water supply are determined to exist and those conditions cannot be immediately abated; or
- Failure to comply with Federal, State, or local laws, including this ordinance, regarding testing, access to, and/or repair of a device.

Specific conditions requiring water shut-off shall include, but not be limited to, the following:

- Any refusal to test or inspect BPA(s).
- Any refusal to install, repair or replace faulty BPAs.
- Any direct or indirect connection between a Potable Water system and a Non-Potable Water system.
- Any unprotected direct or indirect connection between a Potable Water system and a system or equipment containing a Contaminant.
- Any unprotected direct or indirect connection between a Potable Water system and an Auxiliary Water system.
- Any Refusal to grant access for Water System Survey, non-compliance testing, or any other reasonably necessary activity on the Premises to ensure the protection of NWC's water supply, its water supply system, or the public health.

15.2 WATER SHUT OFF PROCEDURE

Customer must meet requirements of the Water CCCPH at the customer's Service Connection. BPAs must be installed in accordance with NWC approved specifications and this Ordinance. If NWC determines that there are potential or actual Cross-Connections on the customer's property, it is the responsibility of the customer to install and maintain the BPA(s) at no cost to NWC as a condition to obtaining water service from NWC.

When it becomes necessary to shut-off a Water User's Potable Water connection, the following steps shall be followed:

- NWC personnel shall determine the Degree of Hazard to NWC's Potable Water distribution system.
- Determine whether the service is a qualifying service where water service cannot be immediately terminated for health reasons such as a kidney dialysis center or medical facility. In such cases, the State Water Resources Control Board will be notified, and a non-compliance fee will be assessed.
- Water service to a fire sprinkler system normally will not be shut-off. However, refusal to test and maintain the BPA of a fire system will result in fees for testing by a NWC representative as specified in the fees approved by NWC Board of Directors.

If it is determined that there is an immediate hazard to NWC's Potable Water distribution system, the following steps shall be taken:

- Immediately discontinue of the Water User's Potable Water service, except in cases of Critical Service, i.e.: Hospital, Convalescent Facility, and Home Dialysis Care.
- Verbally notify the Water User of the discontinuance and the reason for the action.
- Notify NWC office personnel and create a work order and then document reasons.
- Follow up with a letter to the Water User listing the corrections required prior to restoring Potable Water service.
- If NWC personnel suspect that a Backflow incident is likely to create or has created a Contamination risk, NWC will notify the State Water Resource Board and local health departments.

Note: See NWC Backflow SOP for the Termination of Water Service.

16.0 TESTING AND MAINTENANCE

16.1 BACKFLOW PREVENTION ASSEMBLY TESTING MAINTENANCE AND REPAIR

Standards for Types of Backflow Protection

The PWS must ensure that each replaced or newly installed PVB, SVB, DC, and RP for protection of the PWS is approved through both laboratory and field evaluation tests performed in accordance with at least one of the following:

- The testing, maintenance and repair of water meter protection BPAs must be performed by personnel who are on NWC Certified Backflow Prevention Assembly Testers List. The NWC Tester List can be obtained from the NWC website or office staff. The BPA providing meter service protection must be approved by NWC and must be installed and tested according to NWC approved standards. BPA testing must follow the methodology as specified in the current edition of the USC FCCC Research Manual of Cross-Connection Control.

- The cost of any testing, maintenance, repair, or replacement of the BPA is the customer's responsibility. NWC is not responsible for work performed by a Tester, or any associated costs incurred.

17.0 CUSTOMER NOTIFICATION OF TESTING AND MAINTENANCE

17.1 ANNUAL NOTICE

NWC or designee will notify each responsible owner, customer, or water user of the date by which the required annual testing of the involved BPA must be completed and when the backflow test report must be furnished to NWC. Written notice will be given by NWC representatives not less than thirty (30) calendar days before the completion date set forth therein. NWC or designee will supply to the customer with the tester name that last tested the customer's backflow assembly. A list of Backflow Testers who are on the NWC's Accepted Tester list shall be made available upon request.

17.2 FINAL NOTICE

Final notice shall be sent, after the first notice, to each Responsible Owner, customer, or Water User who does not comply with the requirements of said first notice. The final notice will advise the Responsible Owner or Water User that corrective actions will be made by NWC.

17.3 REPAIR NOTICE

Upon receipt of a failed BPA test report NWC will send the customer a BPA repair notice, allowing fifteen (15) days for repairs, retest, and submission of BPA test report. (BPA test report must show passing values).

17.4 NON-COMPLIANCE

If a customer does not comply with the annual BPA testing requirement, or any other requirement made a part of testing requirements, within the specified timeframe, NWC will have the backflow assembly tested or repaired by a contracted tester and the cost of the testing/repair and associated administrative costs will be applied to the customer's bill.

If unable to test the assembly non-compliance, NWC will notify customer by phone call or door knocker and will discontinue the water supply if requirement is not met.

18.0 WELLS

18.1 WELL ABANDONMENT

To negate the requirement for an RP at the water Service Connection of a property where there is a well on the premises, the well must be properly abandoned/destroyed in accordance with Riverside County Department of Environmental Health Regulations and the Department of Water Resources Bulletin 74-81 and 74-90, as they may amended or updated from time to time.

Proof of proper and approved abandonment or destruction from Riverside County Department of Environmental Health must be provided to NWC.

18.2 WELL BACKFLOW PROTECTION

Wells equipped with chemical injection devices and/or Non-Potable Water treatment devices, including connections to Recycled or Raw Water shall have a BPA or AG per Riverside County Ordinance 682.3, section 17.

Non-Potable Water wells may be interconnected with Recycled Water providing a BPA or AG is installed as well head protection. This well-headed protection can be a testable double check BPA that is listed on the USC FCCC list of approved BPAs. Interconnections shall only be allowed through cooperation with and approved by NWC Cross-Connection Control Specialist after an inspection and BPA test has been completed.

If the wells are on a site that uses the aquifer for a small water system, the determination for well head protection should be made by the appropriate regulatory agency, usually the local Health Agency for small water systems.

Dormant or inactive wells shall not be interconnected in any way with Recycled Water.

18.3 AGRICULTURAL WELLS

If use of a well is discontinued, all piping and electrical equipment must be removed from the well, and all well head outlets must be flanged or capped. In addition to proper well abandonment as stated in 17.1.

19.0 RECYCLED WATER USE SITES

Recycled Water Use Area means the specific area designated to be served recycled water through Eastern Municipal Water Districts (EMWD) designated pipeline and recycled water service, to Nuevo Water Company's (NWC's) Service area or NWC customer's onsite potable water facilities.

To prevent any actual or potential cross-connections, it is the responsibility of the potable water customer to maintain any recycled water system downstream of the point of connection to EMWD's distribution system. The customer is responsible for ensuring that the recycled water is used on-site according to all the rules and regulations regarding such use. Specifically, the customer is responsible for the following:

- Ensuring that no actual or potential cross-connections exist.
- Maintaining the use site's recycled water system to prevent cross-connections.
- Ensure that all materials used during the design, construction and maintenance of the system are approved or recommended for recycled water use by the EMWD Recycled Water Ordinance and NWC's Cross-Connection Ordinance.
- Obtaining prior authorization from EMWD and NWC and any associated regulatory agency before making any modifications to the potable water system or the approved recycled water system.
- Following the NWC Best Management Practices (BMP'S).

19.1 CONDITIONS OF POTABLE SERVICE

The potable customer must comply with the following conditions on the Recycled Water Use site conditions:

1. *Must comply* with EMWD's and NWC requirements.

2. Runoff Conditions of the Recycled water irrigation systems shall be designed, constructed, and operated using best management practices that minimize runoff of recycled water outside the approved use area.
3. The intentional discharge of recycled water to land not owned or operated by the discharger is prohibited.
4. Recycled water spray, mist or runoff shall not enter dwellings, designated outdoor eating areas or food handling facilities.
5. Ponding Conditions: The irrigation systems must be designed, constructed, and operated to minimize ponding within irrigated areas and discharges are strictly prohibited.
6. Recycled water shall not be used as a domestic water supply or intentionally used as an animal water supply is prohibited.
7. If an actual or potential cross-connection is discovered, the customer shall immediately turn off the system, notify NWC to respond.

19.2 DESIGNATION OF ON-SITE SUPERVISOR

It is the customer's responsibility to provide surveillance and supervision of its on-site recycled water system in a way that always assures compliance with current regulations and the recycled water use requirements. The customer shall designate, with notification going to NWC, an On-site Recycled Water Supervisor to be the contact person with NWC according to applicable BMP's.

19.3 CAUSES FOR TERMINATION OF POTABLE WATER SERVICE DUE TO RECYCLED WATER VIOLATIONS

Cross-Connections as defined by the California Code of Regulations, resulting from the use of recycled water or from the physical presence of a recycled water service, whether by design, construction practice, or system operation are prohibited.

- NWC reserves the right to revoke a Potable Water Service Agreement if any or all the service conditions are not satisfied at all times.
- NWC will report violations to the State Water Resources Control Board and EMWD.
- If a Recycled Water Use site is in Violation of any applicable rules and regulations, and they are not corrected, NWC reserves the right to discontinue the affected potable water service.
- Violations may include non-compliance of any of the BMP's. Cross-Connections being of the utmost importance.
- Any willful or accidental act of noncompliance with existing Federal, state, or local ordinance, code, law, or statute regulating the use of recycled water will constitute a violation.

19.4 AUTHORIZED USES

The use of recycled water is limited to those uses approved by the State Water Resources Control Board, any other use of recycled water is prohibited.

19.5 APPROVED USE AREAS

To assist with the prevention of cross-connections, the recycled water may only be used in areas identified in the recycled water use plans submitted to EMWD and approved by the State Water Resources Control Board, in addition to NWC requirements. A customer must only use the recycled water within the approved recycled water use area.

NWC will require an agreement for recycled water use and the responsible person for the potable and recycled water site must adhere to all NWC BMP's.

Use in Unapproved Areas: The delivery and use of recycled water for any reason, including approved uses, in areas other than those explicitly approved in the current customer agreement from EMWD and the agreement from NWC and without the prior approval of the appropriate Regulatory Agencies, is strictly prohibited.

19.6 CORRECTIVE ACTIONS

If NWC's investigation reveals that a violation has occurred on the reuse site, the customer will be immediately notified of the violation and what corrective actions must be taken. It is the responsibility of the customer to immediately initiate corrective action to eliminate the violation. If NWC believes the violation constitutes a hazard to the public health, NWC will immediately discontinue that potable water service until all violations have been corrected.