Villa Del Monte Mutual Water Company
23414 Skyview Terrace
Los Gatos, CA 95033

Backflow/Cross-Connection Control Resolution

1 Finding of Fact

1.1 Whereas it is the responsibility of the water supplier hereinafter known as the Villa del Monte Mutual Water Company (VDMMWC) to provide water to the consumer at the service connection and/or meter that meets California state water quality standards;

1.2 Whereas it is the VDMMWC's responsibility to prevent the contamination of the public water system from the source of supply (i.e., to the consumer's connection to the service pipe or meter);

1.3 Whereas it is a requirement of the State of California for the VDMMWC to establish a Cross-Connection Control Program (CCCP) satisfactory to the California Department of Public Health (CDPH) and the California State Water Resources Control Board (SWRCB).

1.4 Whereas cross-connections within the consumer's plumbing system pose a potential source for the contamination of the public water supply system.

1.5 Now be it resolved that the VDMMWC establishes the following service policy to protect the VDMMWC-owned water system from the risk of contamination. For public health and safety, this Resolution shall apply equally to all new and existing consumers.

2 Purpose

2.1 The purpose of this Resolution is:

2.1.1 To protect the public potable water supply of VDMMWC from the possibility of contamination or pollution by isolating within the consumer's internal distribution system(s) or the consumer's private water system(s) such contaminants or pollutants which could backflow into the public water systems; and,

2.1.2 To promote the elimination or control of existing cross-connections, actual and/or potential, between the consumer's internal potable water system(s) and non-potable water system(s), plumbing fixtures and industrial piping systems; and,

2.1.3 To provide for the maintenance of a continuing CCCP which will systematically and effectively prevent the contamination or pollution of all potable water systems.

3 Responsibility

3.1 The VDMMWC shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow of contaminants or pollutants through the water service connection. If, in the judgment of VDMMWC an approved backflow prevention assembly is required at the consumer's water service connection for the safety of the water system, VDMMWC or their designated agent shall give notice in writing to said consumer to install such an approved backflow prevention assembly(s) at a specific location(s) on the consumer's premises. The consumer shall install such an approved backflow prevention assembly(s) at the consumer's own expense in the time frame specified in the CCCP; and, failure, refusal or inability on the part of the consumer to install, have tested and maintained said assembly(s), shall constitute grounds for discontinuing water service to the premises until such requirements have been satisfactorily met.

3.2 The President of VDMMWC is authorized to implement, and shall oversee, a Backflow/Cross-Connection Control Program consistent with the intent of this Resolution, the State Water Resources Control Board (SWRCB) Regulations, California Code of Regulations (CCR), and any other applicable laws.

4 Water System

4.1 The water system shall be considered as made up of two parts: VDMMWC's System and the Consumer's System.

4.1.1 VDMMWC's System shall consist of the source facilities and the distribution system; and shall include all those facilities of the water system under the complete control of the utility, up to the point where the consumer's system begins.

4.1.1.1 The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the distribution system.

4.1.1.2 The distribution system shall include the network of conduits used for the delivery of water from the source to the consumer's system.

4.1.2 The Consumer's System shall include those parts of the facilities beyond the termination of the water supplier's distribution system which are utilized in conveying potable water to points of use.

5 Prevention of Contamination

5.1 The consumer's plumbing system, starting from the termination of the VDMMWC's water service pipe, shall be considered a potential high-health hazard requiring the isolation of the consumer's premises by an approved, consumer-installed and maintained air gap (AG), reduced pressure principle backflow assembly (RP) or reduced-pressure detector assembly (RPDA). The AG, RP or RPDA shall be located at the end of the VDMMWC's water service pipe (i.e., as close as practical to the downstream side of the meter). Water shall only be supplied to the consumer through an approved, consumer-installed and maintained AG, RP or RPDA.

5.2 No water service connection to any premise shall be installed or maintained by the VDMMWC unless the water supply is protected as required by VDMMWC rules and regulations and this Resolution. Service of water to any premises shall be discontinued by the VDMMWC if a backflow prevention assembly required by this Resolution is not installed, tested and maintained, or if it is found that a backflow prevention assembly has been removed, bypassed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

5.3 The consumer's system should be open for inspection at all reasonable times to authorized representatives of the VDMMWC to determine whether unprotected cross-connections or other structural or sanitary hazards, including violations of these regulations, exist. When such a condition becomes known, the VDMMWC shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the consumer has corrected the condition(s) in conformance with the VDMMWC CCCP.

5.4 Notwithstanding the aforesaid, the VDMMWC, upon an assessment of the risk of contamination posed by the consumer's plumbing system and use of water, may allow:

5.4.1 A single-family or duplex residential consumer to connect directly to the water service pipe, i.e., without a VDMMWC-approved Double Check Valve Assembly (DC) or RP.

5.4.2 Any consumer other than a single-family or duplex residential consumer, as a minimum, to be supplied through an approved, consumer-installed and maintained RP or RPDA.

6 Conditions for Providing Service

6.1 Water service is provided based on the following terms and limitations:

6.1.1 The consumer agrees to take all measures necessary to prevent the contamination of the plumbing system within their premises and the VDMMWC's distribution system that may occur from backflow through a cross-connection. These measures shall include the prevention of backflow under any backpressure or back siphonage condition, including the disruption of the water supply from the VDMMWC's system that may occur during routine system maintenance or during emergency conditions, such as a water main break.

6.1.2 The consumer agrees to install, operate, and maintain at all times his plumbing system in compliance with the current edition of the California Plumbing Code (CPC) having jurisdiction as it pertains to the prevention of contamination and protection from thermal expansion, due to a closed system that could occur with the present or future installation of backflow preventers on the consumer's service and/or at plumbing fixtures.

6.1.3 For cross-connection control or other public health-related surveys, the consumer agrees to provide for the VDMMWC's employees or agents free access to all parts of the premises during reasonable working hours of the day for routine surveys and at all times during emergencies.

6.1.3.1 Where agreement for free access for the VDMMWC's survey is denied, the VDMMWC may supply water service provided that premises isolation is provided through an approved RP.

6.1.4 The consumer agrees to install all backflow prevention assemblies required by the VDMMWC and to maintain those assemblies in good working order. The assemblies shall be of a type, size, and model approved by a testing organization approved by the SWRCB and acceptable to the VDMMWC. The assemblies shall be installed in accordance with the installation standards outlined in the most recently published edition of the CCCPH, or University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USCFCCCHR) Manual of Cross-Connection Control, unless the manufacturer's requirements are more stringent.

6.1.5 An approved backflow prevention assembly shall be installed on each service line to a consumer's water system at or near the property line or immediately inside the building being served; but, in all cases, before the first branch line leading off the service line wherever the following conditions exist:

6.1.5.1 In the case of premises having an auxiliary water supply which is not or may not be of safe bacteriological or chemical quality and which is not acceptable as an additional source by the VDMMWC, the public water system shall be protected against backflow from the premises by installing an approved backflow prevention assembly in the service line as specified in the CCCP.

6.1.5.2 In the case of premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the public water system, the public system shall be protected against backflow from the premises by installing an approved backflow prevention assembly in the service line as specified in the CCCP. This shall include the handling of process waters and waters originating from the water supplier's system which have been subject to deterioration in

quality.

6.1.5.3 In the case of premises having (1) internal cross-connections that cannot be permanently corrected or protected against, or (2) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist, the public water system shall be protected against backflow from the premises by installing an approved backflow prevention assembly in the service line as specified in the CCCP.

6.2 The consumer agrees to:

6.2.1 Have all assemblies (e.g., RPs and/or DCs) that the VDMMWC relies upon to protect the public water distribution system tested upon installation, annually thereafter and/or more frequently if requested by the VDMMWC, after repair, and after relocation;

6.2.2 Have all testing done by a VDMMWC approved Backflow Prevention Assembly Tester (BPAT), certified by a SWRCB recognized organization certifying Backflow Prevention Assembly Testers, as identified in the CCCPH**.**

6.2.3 Have the RP or DC tested in accordance with current USCFCCHR approved test procedures; or equivalent, as recognized by VDMMWC**.** and

6.2.4 Submit to the VDMMWC the results of the test(s) on VDMMWC-supplied test report forms within the time period and in the format specified by the VDMMWC.

6.3 The consumer agrees to bear all costs for the aforementioned installation, testing, repair, maintenance and replacement of the RP, RPDA, DC or DCDA installed to protect the VDMMWC's distribution system.

6.4 At the time of application for service, if required by the *VDMMWC*, the consumer agrees to submit to the VDMMWC plumbing plans and/or a cross-connection control survey of the premises conducted by a VDMMWC approved Cross-Connection Control Specialist (CCCS), certified by a SWRCB recognized organization certifying Cross-Connection Control Specialists, as identified in the CCCPH.

6.4.1 The cross-connection control survey shall assess the cross-connection hazards and list the backflow preventers provided within the premises. The results of the survey shall be submitted prior to the VDMMWC turning on water service to a new consumer. The cost of the survey shall be borne by the consumer.

6.5 For classes of consumers other than single-family residential, when required by the VDMMWC, the consumer agrees to periodically submit a cross-connection control re-survey of the premises by a VDMMWC approved CCCS, certified by a SWRCB recognized organization certifying Cross-Connection Control Specialists, as identified in the CCCPH. The VDMMWC may require the re-survey to be performed in response to changes in the consumer's plumbing or water use or performed periodically (annually or less frequently) where the VDMMWC considers the consumer's plumbing system to be complex or subject to frequent changes in water use. The cost of the re-survey shall be borne by the consumer.

6.6 Within 90 days of a request by the VDMMWC, a residential consumer shall agree to complete and submit to the VDMMWC a "Water Use Questionnaire" for the purpose of surveying the health hazard posed by the consumer's plumbing system on the VDMMWC's distribution system. Further, the residential consumer agrees to provide within 90 days of a request by the VDMMWC a cross-connection control survey of the premises by a VDMMWC approved CCCS, certified by a SWRCB recognized organization certifying Cross-Connection Control Specialists, as identified in the CCCPH.

6.7 The consumer agrees to obtain prior approval from the VDMMWC for all changes in water use, and alterations and additions to the plumbing system, and shall comply with any additional requirements imposed by the VDMMWC for cross-connection control.

6.8 The consumer agrees to immediately notify the VDMMWC and the local health jurisdiction of any backflow incident occurring within the consumer’s premises (i.e., entry of any contaminant/pollutant into the drinking water) and shall cooperate fully with the VDMMWC to determine the reason for the backflow incident.

6.9 The consumer acknowledges the right of the VDMMWC to discontinue the water supply within 72 hours of giving notice to the consumer, or a lesser period of time if required to protect public health, if the consumer fails to cooperate with the VDMMWC in the survey of premises, in the installation, maintenance, repair, inspection, or testing of backflow prevention assemblies or air gaps required by the VDMMWC, or in the VDMMWC's effort to contain a contaminant or pollutant that is detected in the consumer's system.

6.9.1 Without limiting the generality of the foregoing, in lieu of discontinuing water service, the VDMMWC may install an RP on the service pipe to provide premises isolation, and recover all costs for the installation and subsequent maintenance and repair of the assembly, appurtenances, and enclosure from the consumer as fees and charges for water. The failure of the consumer to pay these fees and charges may result in termination of water service in accordance with the VDMMWC's water billing policies.

6.10 The VDMMWC will require premises isolation for a consumer that is of the high-hazard type or category requiring "Mandatory Premises Isolation" established by the CCCPH, Appendix D (or its replacement).

6.11 Where the VDMMWC imposes mandatory premises isolation in compliance with the CCCP or agrees to the consumer's voluntary premises isolation through the installation of a RP immediately downstream of the VDMMWC's water meter, the consumer acknowledges their obligation to comply with the other cross-connection control regulations having jurisdiction (i.e., latest version of adopted CPC). Although the VDMMWC's requirements for installation, testing, and repair of backflow assemblies may be limited to the DCs and RPs used for premises isolation, the consumer agrees to the other terms herein as a condition of allowing a connection to the VDMMWC's service pipe.

6.12 The consumer agrees to indemnify and hold harmless the VDMMWC for all contamination of the consumer's plumbing system or the VDMMWC's distribution system that results from an unprotected or inadequately protected cross-connection within the consumer’s premises. This indemnification shall pertain to all backflow conditions that may arise from the VDMMWC's suspension of water supply or reduction of water pressure, recognizing that the air gap separation otherwise required would require the consumer to provide adequate facilities to collect, store, and pump water for their premises.

6.13 The consumer agrees that, in the event legal action is required and commenced between the VDMMWC and the consumer to enforce the terms and conditions herein, the substantially prevailing party shall be entitled to reimbursement of all incurred costs and expenses including, but not limited to, reasonable attorney's fees as determined by the Court.

6.14 The consumer acknowledges that the VDMMWC's required survey of a consumer's premises is for the sole purpose of establishing the VDMMWC's minimum requirements for the protection of the public water supply system, commensurate with the VDMMWC's assessment of the degree of hazard.

6.14.1 It shall not be assumed by the consumer or any regulatory agency that the VDMMWC's survey, requirements for the installation of backflow prevention assemblies, lack of requirements for the installation of backflow prevention assemblies, or other actions by the VDMMWC's personnel constitute an approval of the consumer's plumbing system or an assurance to the consumer of the absence of cross-connections therein.

6.15 The consumer acknowledges the right of the VDMMWC, in keeping with changes to California State regulations, industry standards, or the VDMMWC's risk management policies, to impose retroactive requirements for additional cross-connection control measures.

6.16 The VDMMWC will record the consumer's agreement to the above terms for service on an "Application for Water Service," "Application for Change of Water Service," or other such form prepared by the VDMMWC and signed by the consumer.

7 Implementation of the Cross-Connection Control Program

7.1 The responsibility for administration of the VDMMWC CCCP rests with VDMMWC. General policy direction and risk management decisions are established by the VDMMWC.

7.2 The VDMMWC will employ at least one person designated as the Cross-Connection Control Program Coordinator (CCCPC) to develop and implement the CCC program. The CCCPC shall be responsible for the reporting, tracking, and other administration duties of the cross-connection control program.

7.3 The VDMMWC will engage the services of a certified CCCS to assist the CCCPC with the development and implementation of the VDMMWC Water System's CCCP.

7.4 The VDMMWC, under the direction of the aforementioned CCCS, will prepare a written CCCP to implement the requirements of this Resolution. The written CCCP shall be consistent with this Resolution and shall comply with the requirements of SWRCB's CCCPH.

7.5 The VDMMWC will use the most recently published editions of the following publications as references and technical aids:

7.5.1 *M-14 Backflow Prevention and Cross-Connection Control Recommended Practices,* published by the American Water Works Association, or latest edition thereof.

7.5.2 *Manual of Cross-Connection Control,* published by the Foundation for Cross-

Connection Control and Hydraulic Research, University of Southern California, or latest edition thereof.

7.6 The VDMMWC will incorporate the written CCCP into the Water System Plan and will submit the plan to SWRCB for approval when requested.

7.7 The VDMMWC, in consultation with the aforementioned CCCPC, shall have the authority to make reasonable decisions related to cross connections in cases and situations not provided for in the Resolution or CCCP.

7.8 If any provision in this Resolution, or in the written cross-connection control program is found to be less stringent than or inconsistent with the SWRCB's CCCPH (or its replacement), or other California State statutes or rules, the more stringent State Statute, rule, or regulation shall apply.

8 Enforcement

8.1 This Article shall be enforced pursuant to the rules and regulations set forth above, in addition to any other VDMMWC Articles, Resolutions and/or applicable laws.

Resolution Passed: _____

Effective Date: _____

Signatures :

Mike Miller
President
Villa del Monte Mutual Water Company

Villa Del Monte Mutual Water Company
23414 Skyview Terrace
Los Gatos, CA 95033

Cross-Connection Control Program Plan for the Villa del Monte Mutual Water Company's Water System

Villa Del Monte Mutual Water Company

23414 Skyview Terrace
Los Gatos, CA 95033

1 Requirement for Program

1.1 ***Villa del Monte Mutual Water Company*, PWS ID CA4400595,** hereinafter referred to as "VDMMWC", has the responsibility to protect the public water system from contamination due to cross-connections. A cross-connection may be defined as "any actual or potential connection or structural arrangement between a public or a consumer's water system and any other source or system through which it is possible to introduce into any part of the potable system any used water, industrial fluid, gas, or substance other than the intended potable water with which the system is supplied. Bypass arrangements, jumper connections, removable sections, 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."

1.1.1 All public water systems are required to develop and implement cross-connection control programs (CCCP). The CCCP requirements are contained in the California State Water Resources Control Board's (SWRCB) Cross-Connection Control Policy Handbook (CCCPH). The minimum required elements of a CCCP are as follows:

1.1.1.1 Operating rules or ordinances
1.1.1.2 Cross-Connection Control Program Coordinator (CCCPC)
1.1.1.3 Hazard Assessments
1.1.1.4 Backflow Prevention
1.1.1.5 Certified Backflow Prevention Assembly Testers (BPAT) and Certified Cross- Connection Control Specialists (CCCS)
1.1.1.6 Backflow Prevention Assembly Testing
1.1.1.7 Recordkeeping
1.1.1.8 Backflow Incident Response, Reporting and Notification
1.1.1.9 Public Outreach and Education
1.1.1.10 Local Entity Coordination

2 Program Objectives

2.1 The objectives of the CCCP are to:

2.1.1 Reasonably reduce the risk of contamination of the public water distribution system; and

2.1.2 Reasonably reduce the VDMMWC's exposure to legal liability arising from the backflow of any contaminant originating from the consumer's plumbing system and then supplied to other consumers.

3 Required Elements of Program

3.1 Adoption of Backflow/Cross-Connection Control Resolution

3.1.1 The VDMMWC water system has adopted a Resolution *Backflow/Cross Connection-Control Resolution*, which authorizes the VDMMWC to implement a CCCP. The Resolution also authorizes the system to terminate water service to consumers who do not comply with the Resolution. However, the primary method for protection of the distribution system will be the installation of a backflow preventer by the consumer, at the consumer's expense.

3.1.2 The attached service contract referred to in the Resolution shall be the primary enforcement authority for all new Consumers. (Attach service contract as an appendix.)

3.1.3 For Consumers supplied prior to the adoption of the attached Resolution, an implied service contract allows the Purveyor to protect the distribution system from contamination through a Purveyor-installed backflow preventer on a Consumer's service, at the Consumer's expense.

3.1.4 For customers supplied prior to the adoption of the attached Resolution, an implied service contract allows the Purveyor to protect the distribution system from contamination by requiring the customer, at the customer's expense, to install any required backflow preventers as determined by the Hazard Assessment process.

3.2 Development and Implementation of Procedures and Schedules for evaluating new and existing service connections to assess the degree of hazard

3.2.1 Initial Cross-Connection Hazard Surveys

3.2.1.1 The procedures for evaluating the backflow prevention requirements for new and existing consumers are as follows:

3.2.1.1.1 For all ***new non-residential services***, the VDMMWC will require that the consumer submit with the application for water service an evaluation (performed at consumer's expense) by a certified cross-connection control specialist (CCCS) of the hazard posed by the proposed plumbing system, with recommendations for the installation at the meter of either an Air Gap (AG), Double-Check Valve Assembly (DC) or a Reduced-Pressure Principle Backflow Assembly (RP). The VDMMWC may accept the recommendations or submit the recommendations to a certified CCCS employed by VDMMWC for peer review and concurrence before acceptance.

3.2.1.1.1.1 As an alternative to the above requirement for a survey by a CCCS, the consumer may agree to install an approved AG or RP for premises isolation as a condition of service.

3.2.1.1.2 For all ***new residential services***, the VDMMWC will require that the consumer submit with the application for water service a completed "Water Use Questionnaire". If the consumer's questionnaire indicates special plumbing, such as a lawn sprinkler system, or hazardous water use on the premises, the consumer shall submit to the VDMMWC an evaluation by a certified CCCS of the hazard posed by the proposed special plumbing system, with recommendations for the installation at the meter of a DC, RP or AG.

3.2.1.1.2.1 As an alternative to the above requirement for a survey by a certified CCCS, the VDMMWC, at their discretion, may specify the backflow preventer required to be installed as a condition of service.

3.2.1.1.3 For all ***existing non-residential services***, the VDMMWC will require the consumer to submit to the VDMMWC, within six months of notification, an evaluation by a certified CCCS, of the hazard posed by the plumbing system, with recommendations for the installation at the meter of either an AG, DC or an RP. The VDMMWC may accept the recommendations or submit the recommendations to a CCCS employed by the VDMMWC for peer review and concurrence before acceptance.

3.2.1.1.3.1 As an alternative to the above requirement for a survey by a certified CCCS, the consumer may agree to install an AG or RP for premises isolation within 90 days of notification by the VDMMWC or an alternate time period acceptable to the VDMMWC.

3.2.1.2 For all ***existing residential services***,

3.2.1.2.1 In 2019 VDMMWC required all existing consumers to submit a completed "Water Use Questionnaire." Most of the consumer's replies indicated special plumbing or water use on the premises. After review, the VDMMWC instructed all customers to submit an evaluation by a certified CCCS of the hazards posed to the water system by the consumer's plumbing system, with recommendations for the installation at the meter of either an AG, DC or RP within 90 days of notification.

3.2.1.2.1.1 As an alternative to the above requirement for a survey by a CCCS, the VDMMWC may specify the backflow preventer required to be installed as a condition of service. The VDMMWC's CCCS will provide guidance on the type of backflow preventer to be installed.

3.2.1.2.2 For all existing services, should the consumer fail to supply the required information for a hazard assessment or fail to submit a completed "Water Use Questionnaire," the VDMMWC may have the assessment made by a CCCS employed by the VDMMWC, require the installation of a premises containment backflow preventer, or take other such actions consistent with the previously stated policies and bill the consumer for the associated costs.

3.2.2 Cross-Connection Hazard Survey Schedule for Initial Hazard Assessments

3.2.2.1 The schedule for initial hazard assessment is outlined in the following table. The schedule starts from the date the CCC program is established.

Initial Assessment Task	Schedule
Assessment of all new connections	At time of application for water service
Identification and assessment of high-hazard premises which are listed in Appendix D of the CCCPH	Within nine months
Identification and assessment of hazardous premises supplemental to Appendix D of the CCCPH	Within 12 months
Identification of residential connections with special plumbing facilities and/or water use on the premises	Within 15 months

3.2.3 Cross-Connection Hazard Survey Schedule for Subsequent Hazard Re-Assessments

3.2.3.1 For **residential services**, Subsequent "Water Use Questionnaire's" are not required as all customers are currently compliant with approved backflow prevention devices or have approved plumbing evaluations by a certified CCCS.

3.2.3.2 For all **non-residential services**, the VDMMWC will require the consumer to submit to the VDMMWC, within 60 days of VDMMWC notification, a hazard re-assessment (at the consumer's expense) by a certified CCCS.

3.2.3.3 The frequency of hazard re-assessments is shown in the table below:

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Type of Service	Frequency of Re-Evaluation
Any services with reduced-pressure principle backflow assembly (RP) or Air Gap (AG) installed for premises containment	If evidence exists of changes in the activities or materials on a user's premises, if a user changes account holder, excluding single family residences, or if backflow from a user's premises occurs.
Non-Residential services with double-check valve assembly (DC) installed for premises containment	Every five years and upon change in use or ownership.
Residential services with special plumbing where the purveyor relies upon compliance with California Plumbing Code (CPC)	Every five years. *(questionnaire)*
Residential services with DC installed for premises containment	Every ten years. *(questionnaire)*
Residential services with no known special plumbing or water use on the premises	Every fifteen years and upon change in use, ownership, or plumbing system. *(questionnaire)*

3.2.3.4 The VDMMWC will inform the consumer that the VDMMWC's survey of a consumer's premises (whether by a representative of the VDMMWC or through the evaluation of a questionnaire completed by the consumer) is for the sole purpose of establishing the VDMMWC's minimum requirements for the protection of the public water supply system, and that the required backflow protection will be commensurate with the VDMMWC's assessment of the degree of hazard.

3.2.3.5 The VDMMWC will also inform the consumer or any regulatory agencies that the VDMMWC's survey, requirements for the installation of backflow prevention assemblies, lack of requirements for the installation of backflow prevention assemblies, or other actions by the VDMMWC's personnel or agent do not constitute an approval of the consumer's plumbing system or an assurance to the consumer or any regulatory agency of the absence of cross-connections.

3.2.4 Backflow Preventer Requirements

3.2.4.1 The following service policy shall apply to all new and existing consumers:

3.2.4.1.1 The VDMMWC will require that water service to all **non-residential consumers** be isolated at the meter by an approved AG, DC or RP acceptable to the VDMMWC. All high-hazard connections shall be isolated with an AG or RP.

3.2.4.1.2 The VDMMWC will require all **residential consumers** with facilities of the type described in the SWRCB's CCCPH Appendix D (or its replacement) to be isolated with an AG or RP. All other residential consumers with special plumbing or water use on the premises will be isolated with a RP. "Special plumbing" includes, but is not limited to, the following:

3.2.4.1.2.1 A lawn irrigation system.

3.2.4.1.2.2 A solar water heating system.

3.2.4.1.2.3 An auxiliary source of supply (e.g., a non-potable water reuse system, a well or creek).

3.2.4.1.2.4 Piping for livestock watering, hobby farming, etc.; or

3.2.4.1.2.5 A residential fire sprinkler system.

3.2.4.1.3 **Additional premises requiring premises isolation.** The VDMMWC has chosen to supplement Appendix D of the CCCPH by identifying additional premises or premises types for which premises isolation is mandated.

3.2.4.1.3.1 The following list includes those facilities and activities requiring backflow protection with the minimum level indicated. This list may be subject to change based on the findings of VDMMWC's inspection of the premises. This is a non-exclusive list and any facility or activity not shown may be required to install backflow prevention devices as determined by the CCCCS.

1. Automotive Repair and Service Facilities – RP
2. Autopsy Facilities – RP
3. Bars - RP
4. Beverage Bottling Plant – RP
5. Breweries – RP
6. Buildings
   a. Any building with sewage pumps or ejectors – RP
   b. Any building containing non-potable water reuse systems utilizing pumps – RP
   c. Any building containing mechanical equipment using chemicals with a potable water makeup line connected to the mechanical equipment. – RP
   d. Any building containing a carbonator (soft drink dispenser) -RP
   e. Any non-residential or non-single family residential with an ornamental fountain– RP
   f. Multi-storied building with over 40 feet in height from service connection or that uses booster pumps or elevated storage tank to distribute water on site – RP
   g. Any commercial structure in which the specific business activity cannot be ascertained or is subject to change without a building permit - RP
7. Fire Sprinkler Systems. (Retrofitting existing fire sprinkler systems shall require the Consumer to provide the LAA and VDMMWC with an updated hydraulic analysis to certify proper system operation with the additional pressure loss. The Public Works Department, in addition to the Fire Department, shall review and approve all applications for construction or retrofit of fire sprinkler systems.)
   a. Commercial Fire Sprinkler Systems
      1. Systems utilizing only the VDMMWC water supply –DC
      2. Systems utilizing the VDMMWC water supply and that also contain chemical additives, on site water storage, auxiliary water supplies or fire booster pumps – RP
      3. Existing systems with a single detector check will not require retrofit provided the check valves are tested in accordance with NFPA 25 requirements and do not require repair or replacement. If the existing single detector check does not meet NFPA 25 requirements and/or requires repair or replacement, then a DC shall be installed.
   b. Residential Fire Sprinkler Systems
      1. Systems utilizing only the VDMMWC water supply through a combination service connection (domestic and fire) – DC
      2. Systems utilizing the VDMMWC water supply through a combination service connection (domestic and fire) and that also contain chemical

additives, on site water storage, auxiliary water supplies or fire booster pumps – RP

3. Systems that are constructed using potable water piping in a complete flow through design (no dead ends) to prevent stagnant water and utilizing on the VDMMWC water supply may be protected with a single spring loaded check at the internal point of connection. This provision does not apply to parcels with more than one service connection.

8. Chemical Plants – Any premises, where the manufacturing, storing, compounding, or processing of chemicals occurs. Where chemicals are used as additives in the processing of products. - RP
9. Commercial Kitchens or Food Preparation Facilities - RP
10. Convalescent Homes - RP
11. Dairy Processing Plants - RP
12. Dental Clinics - RP
13. Dry Cleaning Facilities – RP
14. Fuel Storage or Dispensing Facilities - RP
15. Film Processing Facilities – RP
16. Florists - RP
17. Grocery Stores – RP
18. Hazardous or potentially hazardous treatment processes with pumping equipment. -RP
19. Hospitals – RP
20. Ice Manufacturing Plants – RP
21. Indoor Fitness facilities with a Spa or Pool – RP
22. Irrigation systems with capabilities for injecting fertilizers, or hazardous chemicals. –RP
23. Irrigation systems only single use meter – RP
24. Laboratories – including, but not limited to, teaching institutions, biological and analytical facilities. - RP
25. Laundries (Commercial) – RP
26. Massage Therapy Clinics and Spas - RP
27. Medical Building and Clinics – RP
28. Metal Manufacturing, Cleaning, Processing or Fabricating Plants - RP
29. Morgues – RP
30. Mortuaries – RP
31. Multiple Services: Includes two or more interconnected services provided by one or more water suppliers to a single Owner and/or Operator complex – RP
32. Nursing Homes - RP
33. Oil/Gas Production, Storage or Transmission premises – RP
34. Paper and Paper Products Manufacturing Plants – RP
35. Pet Stores – RP
36. Plastic Manufacturing, Extruding and Injection Molding – RP
37. Plating Plants – RP
38. Public or Commercial Swimming Pool – RP
39. Portable Spray or Cleaning Equipment which can be connected to the *VDMMWC* water system – RP

40. Radioactive Materials or Substances processing or storage – AG
41. Recreational Vehicle clean-out station - RP
42. Recreational Vehicle community - RP
43. Recycled Water – This includes premises where recycled water is used with no interconnection to the VDMMWC water system – RP
44. Restaurant - RP
45. Restricted, Classified, or Other Closed Facilities – RP
46. Rubber Manufacturing – RP
47. Salon, Hair and/or Nails - RP
48. Sand and Gravel Plants – RP
49. Sanitariums - RP
50. Schools, Colleges and University – RP
51. Sewer Treatment Facilities- AG
52. Solar Heating
    a. Solar collection systems that contain any hazardous materials and have a direct connection to the VDMMWC water system. – RP
    b. Solar system that is once through such as domestic hot water systems do not require protection.
53. Tank Trucks – AG
54. Vehicle Washing Facilities – RP
55. Veterinary Facilities, Kennels, Animal Boarding- RP

3.2.4.2 For all consumers, the required premises isolation AG, DC or RP shall be:

3.2.4.2.1 Purchased and installed by the consumer (at the consumer's expense) immediately downstream of the water meter in accordance with the VDMMWC's standards described hereinafter; and

3.2.4.2.2 Maintained, tested, and inspected in accordance with the VDMMWC's standards described hereinafter.

3.2.4.3 For new consumers, the VDMMWC will not turn on water (except for testing purposes) at the meter until the consumer complies with the above requirements.

3.2.4.3.1 The failure of the consumer to comply with the VDMMWC's installation and maintenance requirements shall constitute a breach of contract by the consumer. The VDMMWC may then proceed with corrective action provisions stipulated in the contract.

3.2.5 Approved Backflow Preventer Installation

3.2.5.1 All backflow preventers relied upon by the Purveyor to protect the public water system shall meet the definition of "approved backflow preventer" as contained in CCCPH.

3.2.5.2 All Air Gap installation requirements:

3.2.5.2.1 The receiving water container to 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;

3.2.5.2.2 all piping between the Consumer'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;

3.2.5.2.3 the PWS must ensure that the AG specified in CCCPH section 3.3.1 (a) has been installed; and

3.2.5.2.4 any new air gap installation at a user service connection must be reviewed and approved by the State Water Board prior to installation.

3.2.5.3 Backflow preventer installation requirements:

3.2.5.3.1 Installed in the orientation for which they are approved.

3.2.5.3.2 Installed in a manner that will protect them from weather-related conditions such as flooding and freezing.

3.2.5.3.3 Installed as close to the point of connection to the Purveyor water supply as practical.

3.2.5.3.4 In no case shall a cut, tee, or tap be made between the consumer's point of connection to the public water system and the backflow prevention assembly.

3.2.5.3.5 Installation of a backflow prevention assembly greater than 12 inches away from the water meter must be approved in advance by Purveyor. The service line between the water meter and the backflow prevention assembly shall be sleeved or capped by concrete to prevent future interconnections.

3.2.5.3.6 DC and RP assemblies shall be installed with a minimum side clearance of twelve inches, except that a minimum side clearance of twenty-four inches must be provided on the side of the assembly that contains the test cocks. Purveyor may approve alternate clearances providing that there is adequate clearance for field testing and maintenance.

3.2.5.3.7 No post-manufacture modifications to backflow prevention assemblies shall be

accepted.

3.2.5.3.8 A manner and location that facilitates their proper operation, maintenance, and testing or inspection, and in compliance with safety regulations.

3.2.5.3.9 Accordance with the installation standards outlined in the most recently published edition of the CCCPH, or University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USCFCCCHR) Manual of Cross-Connection Control, unless the manufacturer's requirements are more stringent.

3.2.5.3.10 All backflow prevention assembly installations shall be inspected by the Purveyor prior to backfill, to ensure compliance with these requirements.

3.2.5.3.11 Installations shall conform to standard construction drawings and specifications of the Purveyor.

3.2.5.4 The Purveyor has no regulatory responsibility or authority over the installation and operation of the Consumer's plumbing system. The Consumer is solely responsible for compliance with all applicable regulations and for prevention of contamination of the plumbing system from sources within their premises. Any action taken by the Purveyor to survey plumbing, inspect or test backflow prevention assemblies, or to require premises containment (installation of DC, RP or AG on service) is solely for the purposes of reducing the risk of contamination of the Purveyor's distribution system.

3.2.5.5 The Purveyor will inform the Consumer that any action taken by the Purveyor shall not be construed by the Consumer as guidance on the safety or reliability of the Consumer's plumbing system. The Purveyor will not provide advice to the Consumer on the design and installation of plumbing other than through the general public education program.

3.2.5.6 Except for easements containing the Purveyor's distribution system, the Purveyor will not undertake work on the Consumer's premises.

3.2.5.7 All presently installed backflow prevention assemblies which do not meet the requirements of this section but were approved assemblies for the purposes described herein at the time of installation and which have been properly maintained, shall, except for the field testing and maintenance requirements, be excluded from the requirements of these rules so long as the Purveyor and/or Health Officer is assured that they will satisfactorily protect the water Purveyor's system. Whenever the

existing assembly is moved from the present location or requires more than annual testing or when the (Purveyor or Health Officer) finds that the maintenance constitutes a hazard to health, the unit shall be replaced by an approved backflow prevention assembly meeting the requirements of Purveyor.

3.2.5.8 DCs installed to mitigate a health hazard shall be replaced with an approved RP or AG at the discretion of, and within the time period specified by Purveyor.

3.2.5.9 Improper installations such as an installation in a confined space, with unapproved modifications or in an unapproved configuration or orientation will be retrofitted with an approved method of backflow prevention installed in accordance with Purveyor's installation requirements, at the expense of the Consumer, when repair of the assembly is required to pass a functional test.

3.2.5.10 Notwithstanding anything contained herein, installations that create a risk to public health will require retrofit.

3.2.5.11 The Purveyor will ensure that approved backflow prevention assemblies protect the public water system from contamination. Any backflow prevention device or assembly required herein shall be of a type, make, model and size approved by the Purveyor. The term "Approved Backflow Prevention Assembly" shall mean an assembly that has been manufactured in full conformance with the standards established by at least one of the following:

3.2.5.11.1 Standards found in Chapter 10 of the Manual of Cross-Connection Control, Tenth Edition, published by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research; or

3.2.5.11.2 Certification requirements for BPAs in the Standards of ASSE International current as of 2022 that include ASSE 1015-2021 for the DC, ASSE 1048-2021 for the DCDA & DCDA-II, ASSE 1013-2021 for the RP, and ASSE 1047-2021 for the RPDA & RPDA-II and must have the 1YT mark.

3.2.5.12 Said USCFCCCHR and ASSE standards and specifications have been adopted by Purveyor. Final approval shall be evidenced by a "Certificate of Approval" for the said USCFCCCHR and ASSE Specifications, issued by an approved testing laboratory.

3.2.5.13 Testing laboratories other than the laboratories listed above will be added to an approved list as they are qualified by the SWRCB.

3.2.5.14 Backflow preventers that may be subjected to backpressure or backsiphonage that have been fully tested and have been granted a Certificate of Approval by said qualified laboratory and are listed on the laboratory's current list of approved backflow prevention assemblies, may be used without further testing or qualification.

3.2.6 Schedule for Installation of Backflow Preventers

3.2.6.1 The following table shows the schedule that the VDMMWC will follow for installation of backflow preventers when they are required (based on the hazard evaluation).

Type of Service	Schedule
New connections with cross-connection hazards	Before service is initiated
Existing connections with CCCPH Appendix D-type hazards and other high cross-connection hazards	Within 90 days after notification
Existing connections other than CCCPH Appendix D type high cross-connection hazards	Within 180 days after notification
Existing fire protection systems using chemicals or supplied by unapproved auxiliary water source	Within 90 days after notification
Existing fire protection systems not using chemicals and supplied by VDMMWC's water	Within 1 year after notification

The VDMMWC may consider granting an extension of time for installation of a backflow prevention assembly for an existing service connection if requested by the consumer.

3.2.7 Program Administration

3.2.7.1 The responsibility for administration of the CCCP rests with the VDMMWC. General policy direction and risk management decisions are established by the VDMMWC's President.

3.2.7.2 The VDMMWC will employ or have on staff at least one person designated as the Cross-Connection Control Program Coordinator (CCCPC) to develop and implement the CCCP. The CCCPC shall be responsible for the reporting, tracking, and other administration duties of the cross-connection control program.

3.2.7.3 The following cross-connection related tasks will be performed by or under the direction of the VDMMWC's CCCPC:

3.2.7.3.1 Preparation of and recommendations regarding changes to the CCCP.

3.2.7.3.2 Performance of and/or reviews of CCC hazard evaluations.

3.2.7.3.3 Recommendations on the type of backflow preventer to be installed.

3.2.7.3.4 Recommendations on schedules for retrofitting of backflow preventers.

3.2.7.3.5 Inspections of backflow preventers for proper application and installation.

3.2.7.3.6 Reviews of backflow preventer inspection and test reports.

3.2.7.3.7 Reviews of backflow testing quality control information.

3.2.7.3.8 Recommendations and/or the granting of exceptions to mandatory premises isolation.

3.2.7.3.9 Participation in or cooperation with other water utility staff in the investigation of backflow incidents and other water quality problems.

3.2.7.3.10 Completion of Backflow Incident Reports; and

3.2.7.3.11 Completion of CCCP Activity and Program Summary Reports.

3.2.7.4 The VDMMWC may delegate other CCCP activities to other personnel who are not CCCPCs, including clerical support staff. These activities include:

3.2.7.4.1 Administration of paperwork associated with service agreements.

3.2.7.4.2 Mailing, collecting, and initial screening of hazard evaluation/water use questionnaires.

3.2.7.4.3 Mailing of assembly testing notices.

3.2.7.4.4 Receiving and screening of assembly testing reports.

3.2.7.4.5 CCCP database administration and record keeping.

3.2.7.4.6 Dissemination of public education material; and

3.2.7.4.7 Assisting tasks associated with coordination with the Local Administrative Authority and/or SWRCB.

3.2.7.5 The following table identifies the current CCCPC employed or retained on contract by the VDMMWC to manage the VDMMWC's CCCP:

Current Cross Connection Control Program Coordinator Contact Information

Name of CCCPC	Pradeep Sander
Address	23496 Belaire Ct.
City, State, Zip	Los Gatos, CA 95033
Telephone Number	(831) 239-4949
CCCS Certification Number (If Applicable)	NA

3.2.8 Backflow Assembly Inspections and Testing

3.2.8.1 Inspection and Testing of Backflow Prevention Assemblies

3.2.8.1.1 All backflow preventers that the VDMMWC relies upon for protection of the water system will be subject to inspection and, if applicable, testing. This includes backflow preventers installed for in-premises protection that the VDMMWC relies upon for protection of the water systems.

3.2.8.1.2 Inspection and testing of backflow prevention assemblies will be as follows:

3.2.8.1.2.1 The VDMMWC's CCCPC, in consultation with a certified CCCS, will inspect backflow preventers for proper application (i.e., to ensure that the preventer installed is commensurate with the assessed degree of hazard).

3.2.8.1.2.2 Either a certified CCCS or certified Backflow Prevention Assembly Tester (BPAT) pre-approved by the VDMMWC will perform inspections of backflow preventers for correct installation.

3.2.8.1.2.3 A certified BPAT will test all assemblies relied upon by the VDMMWC to protect the public water system.

3.2.8.1.3 Consumers with a backflow prevention assembly on their premise shall have the assembly inspected and tested on at least an annual basis by a BPAT.

3.2.8.1.4 It shall be unlawful to use any backflow prevention assembly required by the CCCPH (or its replacement) and this Resolution unless such assembly is in good repair. Assemblies which are found not to be in good repair shall be repaired and re-tested as required by this Resolution immediately upon discovery. A backflow assembly test report shall be filed with VDMMWC within five (5) days after such a test.

3.2.8.1.5 When assemblies are determined to be defective, they shall be repaired or replaced by the consumer within 14 calendar days in accordance with *Section 3.2.8.7*, or service will be discontinued as specified in *Section 3.2.8.8*. If service is discontinued, the consumer shall pay the required fees as specified in the "*Application for Water Service*".

3.2.8.2 Frequency of Inspection and Testing

3.2.8.2.1 Inspection and testing of backflow preventers shall be conducted:

3.2.8.2.1.1 At the time of installation.

3.2.8.2.1.2 Annually after installation.

3.2.8.2.1.3 After a backflow incident; and

3.2.8.2.1.4 After repair, reinstallation, relocation, or re-plumbing.

3.2.8.2.1.5 Any time the assembly is found to not be in good repair.

3.2.8.2.2 All air gap separations shall be inspected annually and after modifications to the installation.

3.2.8.2.3 The VDMMWC may require a backflow preventer to be inspected and/or tested more frequently than once a year when it protects against a high-health hazard or when it repeatedly fails tests or inspections.

3.2.8.3 Responsibility for Inspection, Testing and Repairs

3.2.8.3.1 The VDMMWC will be responsible for inspection, testing and repairs of all VDMMWC-owned backflow preventers and air gaps.

3.2.8.3.2 The VDMMWC will require the consumer to be responsible for inspection, testing and repair of backflow preventers and air gaps owned by the consumer. The consumer shall employ, at the consumer's expense, a certified BPAT pre-approved by the VDMMWC to conduct the inspection and test within the time period specified in the testing notice sent by the VDMMWC. The original test report shall be completed and signed by the BPAT, and returned to the VDMMWC, before the due date specified by the VDMMWC.

3.2.8.3.3 The consumer may request an extension of the due date for returning a test report by submitting a written request to the VDMMWC. The VDMMWC may grant one extension up to 90 days.

3.2.8.4 Notification of Inspection and/or Testing

3.2.8.4.1 The VDMMWC will notify in writing all consumers who own backflow preventers that are relied upon to protect the public water system to have their backflow preventer(s) inspected and/or tested. Notices will be sent out not less than 30 days before the due date of the inspection and/or test. The notice will also specify the date (up to 30 days after the due date of the inspection and/or test date) by which the inspection/test report must be received by the VDMMWC. If the VDMMWC has not received a passed test report in the designated time frame, the enforcement policies in *Section 3.2.8.8* shall be applied.

3.2.8.5 Approved Test Procedures

3.2.8.5.1 The Purveyor will require that all assemblies relied upon to protect the public water system be tested in accordance with approved test procedures as specified in CCCPH Article 4.

3.2.8.6 Backflow Assembly Test Reports

3.2.8.6.1 Test results must be submitted within five (5) calendar days of the test date. Test results may be submitted electronically in PDF format or by mail or in person in original hard-copy format to:

Villa del Monte Mutual Water Company
Attention: Cross-Connection Control Program
23414 Skyview Terrace
Los Gatos, CA 95033
president@vdmwater.com

3.2.8.7 Repairs

3.2.8.7.1 Any assembly that fails routine testing shall be repaired within fourteen (14) days of the initial test date.

3.2.8.7.2 The consumer must notify VDMMWC if repairs cannot be made within the specified period.

3.2.8.7.3 Only Original Equipment Manufacturer (OEM) parts shall be used to repair backflow prevention assemblies. If OEM replacement parts are not available, then an approved backflow prevention assembly must be installed to replace the existing assembly.

3.2.8.7.4 VDMMWC shall determine the level of risk the failed assembly presents to the water supply and, if necessary, discontinue water service.

3.2.8.7.5 Pursuant to section 116875 of California Health and Safety Code, any failed assembly that is not “lead free”, that is not specifically exempted by section 116875, must be replaced with an approved “lead free” assembly rather than being repaired.

3.2.8.8 Enforcement

3.2.8.8.1 To enforce this Resolution, it may become necessary to discontinue water service through connection(s) to the parcel, or parcels under common control. In the event water service is discontinued, the Local Health Agency will be notified. Conditions that warrant discontinuance of service include but are not limited to the following:

3.2.8.8.1.1 When VDMMWC identifies a water use that represents a clear and immediate hazard to the potable water supply that cannot be immediately abated.

3.2.8.8.1.2 Direct or indirect connection between the public water system and a sewer line.

3.2.8.8.1.2.1 For conditions 3.2.8.8.1.1 and 3.2.8.8.1.2 VDMMWC will take the following steps:

3.2.8.8.1.2.1.1 Make a reasonable effort to advise water user of intent to terminate water service.

3.2.8.8.1.2.1.2 Terminate water supply and lock the service valve. The water service will remain inactive until correction of violation has been approved by VDMMWC.

3.2.8.8.1.3 Unprotected direct or indirect connection between the public water system and an auxiliary water system.

3.2.8.8.1.4 Refusal to allow inspection of an air gap separation.

3.2.8.8.1.5 Refusal to install a required backflow prevention assembly.

3.2.8.8.1.6 Refusal to test a backflow prevention assembly.

3.2.8.8.1.7 Refusal to repair or replace a faulty backflow prevention assembly.

3.2.8.8.1.8 Refusal to upgrade a backflow prevention assembly to the necessary level of protection.

3.2.8.8.1.9 Any refusal to comply with the regulations set forth in this Resolution

3.2.8.8.1.9.1 For conditions 3.2.8.8.1.3 through 3.2.8.8.1.9 VDMMWC will notify the consumer in writing specifying the corrective action needed and the time period in which it must be done. If no action is taken within the allowed time periods, water service may be terminated.

3.2.8.8.2 When a consumer fails to send in the inspection/test report within 15 days after the due date specified, and the VDMMWC has not approved an extension to the due date, the VDMMWC will take the following enforcement action:

3.2.8.8.2.1 The VDMMWC will send a second notice giving the consumer an additional 15 days to send in the inspection/test report.

3.2.8.8.2.2 If the consumer has not sent in the inspection/test report within 15 days of the due date given in the second notice, the VDMMWC will send a third notice, by certified mail, or by hand delivery, giving the consumer an additional 10 days to send in the report. The notice will also inform the consumer that failure to satisfactorily respond to this notice will result in water service shut-off.

3.2.8.8.2.3 The VDMMWC will send copies of the third notice to the owner and occupants of the premises (if different from the consumer).

3.2.8.8.2.4 If the owner and/or occupants have not responded satisfactorily to the VDMMWC within 10 days of the due date specified in the third notice, the VDMMWC will implement water service shut-off procedures. If the consumer's water service is discontinued due to violations of this Program, the consumer shall be subject to Delinquency Shut Off Fee specified in VDMMWC's current Water Rate Resolution. Upon seeking renewed service from the VDMMWC, the backflow prevention assembly being returned to service must be tested in accordance with *Section 3.2.8*.

3.2.8.8.3 When a consumer fails to send in the repair/replacement inspection/test report within 14 days after the initial test date indicated on the test form, and the VDMMWC has not approved an extension to the due date, the VDMMWC will take the following enforcement action:

3.2.8.8.3.1 The VDMMWC will send a second notice giving the consumer an additional 10 days to send in the passing inspection/test report.

3.2.8.8.3.2 If the consumer has not sent in the passing inspection/test report within 10 days of the due date given in the second notice, the VDMMWC will send a third notice, by certified mail, or by hand delivery, giving the consumer an additional 10 days to send in the report. The notice will also inform the consumer that failure to satisfactorily respond to this notice will result in water service shut-off.

3.2.8.8.3.3 The VDMMWC will send copies of the third notice to the owner and occupants of the premises (if different from the consumer).

3.2.8.8.3.4 If the owner and/or occupants have not responded satisfactorily to the VDMMWC within 10 days of the due date specified in the third notice, the VDMMWC will implement water service shut-off procedures. If the consumer's water service is discontinued due to violations of this Program, the consumer shall be subject to Delinquency Shut Off Fee specified in VDMMWC's current Water Rate Resolution. Upon seeking renewed service from the District, the backflow prevention assembly being returned to service must be tested in accordance with Section 3.2.8.

3.2.8.8.4 In addition to the grounds for termination set forth in this section, VDMMWC may terminate potable water service to any premises if a required backflow prevention assembly or air gap is removed by the consumer, or if VDMMWC finds evidence that an installed backflow prevention assembly or air gap has been bypassed or rendered ineffective.

3.2.8.8.5 If VDMMWC decides that termination of service is either too difficult or may pose a health issue they may choose to have the necessary repairs, replacements, or installations completed by a contractor and pass the cost for such service and an administrative penalty on to the consumer. The consumer will be notified in writing specifying the corrective actions being taken and time period in which it will be done. If no action is taken by the consumer, then work shall begin. If the consumer fails to pay the cost and administrative penalty within 30 day of notification, VDMMWC may cause a lien to be placed against the property in accordance with the procedures set forth in Title 14 of the California Civil Code.

3.2.8.8.6 Any consumer aggrieved by a decision reached pursuant to the provisions of this Resolution may file an appeal from the decision to VDMMWC's President. The appeal shall be in written form and shall briefly describe the nature of the decision made and the reasons for the appeal. Within 30 days of receiving such an appeal, VDMMWC's President shall select a date to hold a hearing. VDMMWC's President shall give the appealing party five (5) days written notice of the time and place of the hearing, by United States mail, postage prepaid, addressed to the persons at their last known addresses. The hearing need not be a formal public hearing, provided that all interested persons shall be given a reasonable opportunity to be heard. VDMMWC's President shall determine whether the appeal is well founded, based upon the provisions of the Resolution, and the decision shall be final and conclusive.

3.2.8.8.7 Pursuant to section 116820 of California Health and Safety Code, any person who violates any provision of Article 2 of Chapter 5 Part 12 of Division 104 of the California Health and Safety Code, violates any order of VDMMWC pursuant to the CCCP, or knowingly files a false statement or report required by the VDMMWC pursuant to this Resolution is guilty of a misdemeanor punishable by a fine not exceeding five hundred dollars ($500.00) or by imprisonment not exceeding 30 days in the county jail or by both such fine and imprisonment. Each day of a violation of any provision of Article 2 or any order of VDMMWC beyond the time state for compliance of the order shall be a separate offense.

3.2.8.8.7.1 Upon finding by VDMMWC that a person has violated any provision of the CCCP, directive of VDMMWC made pursuant to the CCCP, knowingly filed a false statement or report required pursuant to the CCCP, or by bypassing or rendering inoperative any backflow prevention assembly installed under the provisions of the CCCP, VDMMWC may issue an administrative order requiring that the violation be corrected and may issue an administrative fine up to five hundred dollars ($500.00).

3.2.8.8.7.2 Each day of a violation as described in Section 3.2.8.8.7.1 shall constitute a separate violation.

3.2.8.8.7.3 Notice of the fine shall be served by certified mail with a description of the violation and supporting facts. The notice shall contain an advertisement of the right to request a hearing before the VDMMWC President or their designee appealing the imposition of the fine.

3.2.8.8.7.4 Appeals must be requested in writing and shall provide facts disputing the violation. Appeals must be addressed to the VDMMWC's President and must be received within ten (10) days of the date appearing on the notice of the fine. The decision of the VDMMWC's President shall be provided by certified mail. The decision will constitute a final administrative order with no additional administrative right of appeal.

3.2.8.8.7.5 If said fine is not paid within thirty (30) days from the date appearing on the notice of the fine or the notice of determination from the VDMMWC after the appeal hearing, the fine may be referred to a collection agency within or external to the VDMMWC. In addition, any outstanding fines must be paid prior to the issuance or renewal of any registration or certification.

3.2.8.8.8 Any person or persons who willfully fails to install, or permit to be installed, a backflow prevention assembly as required by VDMMWC or who willfully bypasses, alters or refuses to maintain a backflow prevention assembly, shall be guilty of a misdemeanor and upon conviction thereof shall be subject to a fine not exceeding $500.00 or imprisonment in the County jail for a period not exceeding six months or by both fine and imprisonment. (California Health and Safety Code, Section 116820).

3.2.8.9 Fees and Charges

3.2.8.9.1 Administration of this Program requires the collection of fees as appropriate that can be assigned to the consumer and services performed that are not considered an appropriate charge under VDMMWC's Water Rates. These fees are as follows.

3.2.8.9.2 VDMMWC Cross-Connection Control Fee Schedule

Backflow Testing Program

Cost will be based on the last years costs divided by the total number of
users and billed on a monthly basis

3.2.9 Recordkeeping

3.2.9.1 Types of Records and Data to be Maintained

3.2.9.1.1 The Purveyor will maintain records of the following types of information required by the CCCPH:

3.2.9.1.1.1 Service connections/Consumer premises information including:

3.2.9.1.1.1.1 Two most recent Hazard Assessments for each user premise;

3.2.9.1.1.1.2 required backflow preventer to protect the public water system;

3.2.9.1.1.1.3 the most current cross-connection tests (e.g. shutdown test, dye test);

3.2.9.1.1.1.4 if a user supervisor is designated for a user premise, the current contact information for the user supervisor and water user, and any applicable training and qualifications as described by CCCPH section 3.2.2(f);

3.2.9.1.1.1.5 descriptions and follow-up actions related to all backflow incidents;

3.2.9.1.1.1.6 if any portion of the cross-connection control program is carried out under contract or agreement, a copy of the current contract or agreement;

3.2.9.1.1.1.7 the current Cross-Connection Control Plan as required in CCCPH section 3.1.4; and

3.2.9.1.1.1.8 any public outreach or education materials

issued as required in CCCPH section 3.1.3.(a)(9) for the previous three calendar years;

3.2.9.1.1.2 Backflow preventer inventory and information including:

3.2.9.1.1.2.1 For each AG installation the associated hazard or application and the location, owner, inspection dates, inspection results, person conducting inspection and as-built plans of the AG;

3.2.9.1.1.2.2 Backflow assembly hazard, location, assembly description (type, manufacturer, make, model, size, and serial number), installation, inspection and test dates, test results and data, and person performing test;

3.2.9.1.1.2.3 Results of all BPA field testing and AG and swivel-ell inspections for the previous three calendar years, including the name, test date, repair date, and certification number of the backflow prevention assembly tester for each BPA field test and AG and swivel-ell; and

3.2.9.1.1.2.4 Repairs made to, or replacement or relocation of, BPAs for the previous three calendar years;

3.2.9.1.1.2.5 Information on non-testable backflow preventers, including, if applicable, type, manufacturer, make, model, size, dates of installation and inspections, and person performing inspections.

3.2.9.1.1.3 The Purveyor will maintain records on all assemblies that protect the public water system from contamination. All records shall be made available to the State Water Board upon request.

3.2.9.1.2 How Records will be Maintained

3.2.9.1.2.1 The Purveyor will maintain records using the following methods:

3.2.9.1.2.1.1 Paper/PDF Records

3.2.9.1.2.1.1.1 Backflow Assembly Test Reports

3.2.9.1.2.1.1.2 Cross-Connection Hazard Assessment Reports

3.2.9.1.2.1.1.3 Incident Reports

3.2.9.1.2.1.1.4 Public Outreach Documents

3.2.9.1.2.1.2 Excel or Access data base.

3.2.9.1.2.1.2.1 Consumer Service Connection and Backflow Preventer Inventory

3.2.9.1.2.1.2.2 Hazard Assessment Schedule

3.2.9.1.3 Reports to be Prepared and Submitted to SWRCB

3.2.9.1.3.1 The Purveyor will prepare the following reports required by CCCPH including:

3.2.9.1.3.1.1 Cross-connection control program activities

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report for the calendar year, to be sent to SWRCB when requested;

3.2.9.1.3.1.2 Cross-connection control program summary information, when required, or when there are significant policy changes;

3.2.9.1.3.1.3 Backflow incident reports to SWRCB; and

3.2.9.1.3.1.4 Documentation when exceptions to mandatory premises containment are granted.

3.2.9.1.3.2 At a minimum, the Purveyor's CERTIFIED CCCS will prepare and sign the exceptions reports.

3.2.10 Certified Backflow Prevention Assembly Testers (BPAT)

3.2.10.1 General Requirements

3.2.10.1.1 Certified Backflow Prevention Assembly Testers shall be responsible for ensuring that all backflow prevention assemblies at the consumer's service connection are identified and tested.

3.2.10.1.2 If a BPAT finds an assembly that has been modified or incorrectly installed, they must immediately report the situation to VDMMWC and **not test the assembly.** To report the situation describe it in the "Comments" section of the Backflow Assembly Test Report Form and submit the form. All assemblies must be on the "Approved Backflow Prevention Assemblies" list developed by the FCCCHR. Any modification of an assembly – such as relocation of valves, bypass arrangements, and jumper connections, whether temporary or permanent – invalidates the FCCCHR approval and is not permitted. Likewise, an assembly that has been installed in an orientation for which it was not designed or approved is also not permitted.

3.2.10.1.3 If a BPAT finds a cross-connection hazard that is unprotected, that is, with no backflow prevention assembly or the wrong type of assembly, the tester must inform the consumer of the hazard and potential health risk associated with it. The tester must also report the situation to VDMMWC immediately (by telephone if the hazard has no protection at all). An assembly that is wrong type for the hazard should not be tested.

3.2.10.1.4 BPATs must report the removal or replacement of a backflow prevention assembly on a Backflow Prevention Assembly Test Report. It is important that the information for both the old and new assemblies be reported on the same form.

3.2.10.1.5 Only a licensed plumber may repair, remove, replace or relocate a backflow prevention assembly. A plumbing permit must be obtained from the Department of Building Inspection for any removal, replacement or relocation of any VDMMWC required backflow prevention assembly. A copy of the signed permit must be submitted to VDMMWC within 30 days of approval.

3.2.10.2 List of Pre-Approved Backflow Prevention Assembly Testers (BPATs)

3.2.10.2.1 The VDMMWC will maintain a list of local, CA/NV AWWS-certified BPATs that are pre-approved by the VDMMWC to perform the following activities:

3.2.10.2.1.1 Backflow preventer inspection for proper installation; and

3.2.9.2.1.2 Backflow assembly testing.

3.2.10.2.2 The *VDMMWC* will also maintain a list of local certified CCCSs that are pre-approved by the VDMMWC to perform the following activities:

3.2.10.2.2.1 Cross-connection hazard evaluations.

3.2.10.2.2.2 Backflow preventer inspection for proper application; and

3.2.9.2.2.3 Backflow preventer inspection for proper installation.

3.2.10.2.3 The list(s) will be revised annually or more frequently if necessary.

3.2.10.3 Pre-Approval Qualifications

3.2.10.3.1 BPATs and CCCSs who wish to be included on the VDMMWC's pre-approved list and/or provide testing in the VDMMWC's service area must apply to the VDMMWC and furnish the following information:

3.2.10.3.1.1 Evidence of current certification as recognized by the SWRCB and VDMMWC, in good standing.

3.2.10.3.1.2 Make, model and serial number of testing equipment (BPAT listing only);

3.2.10.3.1.3 Evidence of test equipment verification of accuracy and/or calibration within the past 12 months (BPAT listing only);

3.2.10.3.1.4 All applicants must be certified and be current as a Backflow Prevention Assembly Tester for a period of two years prior to applying.

3.2.10.3.1.5 Applicant and/or Company must not have been removed from another Agency's list, reprimanded by or subject of an investigation by an agency, or water utility related to backflow prevention assembly testing, installation, and repair or reporting.

3.2.10.3.1.6 Applicant and/or Company must not have any unresolved customer complaints reported to the VDMMWC, BPAT certification organization, or the State Contractor's License Board.

3.2.10.3.2 The VDMMWC President may suspend or revoke approval of an individual tester and or company from the list of approved testers if the individual or company fails or refuses to comply with the VDMMWC CCCP Policies and Regulations or engages in dishonest business practices within VDMMWCs jurisdiction, fails to maintain a valid Backflow Prevention Assembly Tester Certification or installs, repairs or tests backflow assemblies in a negligent manner. Failure to abide by any of these requirements may be grounds for exclusion from the approved testers list for a period of (1) one year.

3.2.10.3.3 All applicants must sign and agree to the following BPAT Code of Conduct:

3.2.10.3.3.1 The VDMMWC BPAT Code of Conduct requires BPATs to act honestly, competently, and with integrity and to use their knowledge and skill for the enhancement of public health and the protection of VDMMWC's water system.

3.2.10.3.3.1.1 Be truthful and accurate in what they say, do and write.

3.2.10.3.3.1.2 Adhere to all rules, laws and regulations applicable to the profession.

3.2.10.3.3.1.3 Not misrepresent nor permit misrepresentation of their qualifications.

3.2.10.3.3.1.4 Not conduct themselves in a manner that subverts or attempts to subvert the laws and regulations applicable to the profession.

3.2.10.3.3.1.5 Not misuse the certificate, logo, and marks of the VDMMWC as they are property of VDMMWC.

3.2.10.3.3.1.6 Uphold and follow all policies and procedures required by VDMMWC to remain in good standing.

3.2.10.3.3.1.7 Report any past or pending personal litigation or disciplinary action within the scope of the BPAT certification and resulting resolution to VDMMWC.

3.2.10.3.3.1.8 Not participate in any interest, activity, or influence which may be perceived to influence a decision purely for personal gain and not in the interest of public health and environmental safety.

3.2.10.3.3.1.9 Failure to adhere to the Code is grounds for Suspension or Revocation of the VDMMWC BPAT

certification.

3.2.10.4 Denial, Suspension or Revocation of Tester Certification

3.2.10.4.1 Tester Certification by VDMMWC may be denied, suspended or revoked upon any of the following grounds:

3.2.10.4.1.1 A BPAT is no longer in possession of a current and valid certificate as a Backflow Prevention Assembly Tester issued by an approved certification organization.

3.2.10.4.1.2 A BPAT is no longer in possession of a current and valid test kit calibration certificate.

3.2.10.4.1.3 VDMMWC determines that a material misrepresentation was included or omitted by the BPAT on the initial or renewal application for BPAT certification by VDMMWC.

3.2.10.4.1.4 VDMMWC determines that the BPAT, in the performance of a test or repair required by the VDMMWC, commits an act that may pose a threat to public health and safety.

3.2.10.4.1.5 A BPAT fails to submit backflow assembly test report forms within five (5) days of performing a backflow assembly test required by VDMMWC.

3.2.10.4.1.6 A BPAT repeatedly submits incomplete or incorrect test reports to the VDMMWC.

3.2.10.4.1.7 A BPAT fails to report an assembly that has been modified or incorrectly installed.

3.2.10.4.1.8 VDMMWC determines that a material misrepresentation was included or omitted by the BPAT on the backflow assembly test report form submitted to the VDMMWC by the BPAT.

3.2.10.4.1.9 A BPAT performs a backflow prevention assembly repair with parts other than OEM parts.

3.2.10.4.1.10 A BPAT performs a backflow assembly test using testing procedures other than those accepted by the VDMMWC.

3.2.10.4.1.11 A BPAT fails to ensure that all backflow prevention assemblies at the consumer's service connection are identified and tested.

3.2.10.4.1.12 A BPAT fails to report a cross-connection hazard that is unprotected, that is, with no backflow prevention assembly or the wrong type of assembly.

3.2.10.4.1.13 A BPAT fails to report the removal or replacement of a backflow prevention assembly on a Backflow Prevention Assembly Test Report.

3.2.10.4.1.14 A BPAT performs a repair upon a backflow prevention assembly which has been required to be replaced by the VDMMWC.

3.2.10.4.1.15 If a BPAT has unresolved consumer complaints or complaints

from multiple consumers.

3.2.10.4.1.16 If a BPAT is under investigation by a District Attorney, the CSLB, any Federal or State Law Enforcement agency, VDMMWC or other organization conducting a CCCP with approved BPATs.

3.2.10.4.1.17 Fraud or gross negligence in the performing of their duties.

3.2.10.4.1.18 If a BPAT is removed from another water agency's list of approved BPATs.

3.2.10.4.2 Written notice of the denial, suspension or revocation of an VDMMWC BPAT certification shall be served to the BPAT by certified mail with a description of the violation and supporting facts.

3.2.10.4.2.1 The notice shall contain a statement of the right to request an appeal hearing before the VDMMWC CCCS or their designee

3.2.10.4.2.2 The notice shall contain a statement of the time period of denial, suspension or revocation. VDMMWC may deny, suspend or revoke an VDMMWC BPAT certification for a period between five (5) days and one year, at the discretion of the VDMMWC.

3.2.10.4.2.3 The notice shall contain a statement of the effective date of the denial, suspension or revocation. Suspension or revocation issued pursuant to *Section 3.2.10.4.2* will be effective ten (10) calendar days from the date appearing on the written notice, unless a timely appeal is filed in accordance with *Section 3.2.10.5*.

3.2.10.5 BPAT Appeals

3.2.10.5.1 The decision of the VDMMWC CCCS is appealable to the VDMMWC President.

3.2.10.5.1.1 An appeal must be in writing and be hand-delivered or mailed to the VDMMWC President.

3.2.10.5.1.2 An appeal must be received by the VDMMWC President on or before the effective date of suspension or revocation provided by *Section 3.2.10.4.2.3.*

3.2.10.5.1.3 The filing of a timely appeal will stay a suspension or revocation pending a decision on the appeal by the VDMMWC President or their designee.

3.2.10.5.1.4 A hearing shall be scheduled within thirty (30) days unless an extension is authorized by the appellant.

3.2.10.5.1.4.1 The following rules shall apply to any hearing required by this Section. All parties involved shall have the right to offer testimonial, documentary, and tangible evidence bearing on the issues, to be represented by counsel, and to confront and cross-examine witnesses. Any relevant evidence may be admitted if it is the sort of evidence upon which reasonable persons are accustomed to rely in the conduct of serious affairs. Formal rules of discovery do not apply to proceedings governed by this Section. Unless otherwise specifically prohibited by law, the burden of proof is on the BPAT in any hearing or other matter under this Section.

3.2.10.5.1.5 No reapplication will be accepted within six (6) months after an VDMMWC BPAT certification is revoked.

3.2.10.5.2 The decision of the VDMMWC President or their designee shall be a final administrative order, with no further administrative right of appeal.

3.2.10.6 Quality Assurance

3.2.10.6.1 The VDMMWC's CCCS will review within 30 days of receipt the backflow preventer inspection/test report forms submitted by pre-approved BPATs.

3.2.10.6.2 The VDMMWC's CCCS shall provide follow up on backflow assemblies and/or test reports that are deficient in any way.

3.2.10.6.3 The VDMMWC's CCCS may conduct follow up tests on backflow assemblies tested by a BPAT at the discretion of the VDMMWC.

3.2.10.6.4 The VDMMWC's CCCS may require a BPAT to attend additional training, submit to re-examination or other demonstration of competency or any combination thereof, as may be deemed necessary by the VDMMWC's CCCS.

3.2.10.6.5 The VDMMWC's CCCS will report incidences of fraud or gross incompetence or negligence on the part of any BPAT or CCCS to the VDMMWC President and to the certifying organization as well as any other agencies or authorities as deemed appropriate by the VDMMWC President.

3.2.11 Backflow Incident Response Plan

3.2.11.1 The VDMMWC's CCCS has developed a backflow incident response plan that will be part of the water system's emergency response program. The incident response plan includes, but will not be limited to:

3.2.11.1.1 Consideration of complaints or reports of changes in water quality as possible incidents of backflow;

3.2.11.1.2 Notification of affected population;

3.2.11.1.3 Notification and coordination with other agencies, such as SWRCB, the LAA, and the local health jurisdiction;

3.2.11.1.4 Identification of the source of contamination including water quality sampling and pressure recording;

3.2.11.1.5 Isolation of the source of contamination and the affected area(s);

3.2.11.1.6 Cleaning, flushing, and other measures to mitigate and correct the problem;

3.2.11.1.7 Apply corrective action to prevent future backflow occurrences; and

3.2.11.1.8 Documentation of the investigation, and any response and follow-up activities.

3.2.11.2 Backflow Incident Notification

3.2.11.2.1 The Purveyor's CCCPC shall notify the State Water Board of any known incident of backflow within 24 hours of the determination. If required by the State Water Board, the Purveyor shall issue a Tier 1 public notification pursuant to CCR, Title 22, Section 64463.1.

3.2.11.2.2 If required by the State Water Board, the Purveyor shall submit, by a date specified by the State Water Board, a written incident report describing the details and affected area of the backflow incident, the actions taken by the Purveyor in response to the backflow incident, and the follow up actions to prevent future backflow incidents. The written report shall contain, at a minimum, the information requested in CCCPH Appendix F.

3.2.11.3 Technical Resources

3.2.11.3.1 The Purveyor will use the most recently published edition of the manual, M14 Backflow Prevention and Cross-Connection Control Recommended Practices, published by the American Water Works Association as a supplement to the Backflow Incident Response Plan.

3.2.12 Public Education

3.2.12.1 The VDMMWC will distribute with water bills or some other means, at regular intervals, public education brochures to system consumers. For residential consumers, such brochures will describe the cross-connection hazards in homes and the recommended assemblies or devices that should be installed by the homeowner to reduce the hazard to the public water system. The education program will emphasize the responsibility of the consumer in preventing the contamination of the public water supply. The VDMMWC's staff will produce the public education brochures or the VDMMWC will obtain brochures from:

3.2.12.1.1 CA/NV-AWWA;

3.2.12.1.2 USCFCCCHR;

3.2.12.1.3 Other national backflow prevention associations, such as the American Backflow Prevention Association (ABPA); and/or

3.2.12.1.4 Other water utilities.

3.2.12.2 The information distributed by the VDMMWC will include, but not be limited to, the following subjects:

3.2.12.2.1 Cross-connection hazards in general.

3.2.12.2.2 Irrigation system hazards and corrective actions.

3.2.12.2.3 Fire sprinkler cross-connection hazards.

3.2.12.2.4 Importance of annual inspection and/or testing of backflow preventers; and

3.2.12.2.5 Thermal expansion in hot water systems when backflow preventers are installed for premises isolation.

3.2.12.3 The VDMMWC will distribute information brochures to all consumers every two to three years, and to every new consumer at the time the service agreement is signed.

3.2.12.4 The VDMMWC will maintain records on all assemblies that protect the public water system from contamination. At a minimum, the VDMMWC will maintain records on all premises isolation assemblies required to protect the public water system for a minimum of three years.

3.2.13 Recycled/Reclaimed Water

3.2.13.1 Currently the VDMMWC does not receive or distribute reclaimed water. In the event that reclaimed water use is proposed within the VDMMWC's service area, the VDMMWC will make all cross-connection control requirements mandated by the Permitting Authority in accordance with CCR, Title 22 and comply with such additional requirements.

3.3 Other Provisions

3.3.1 Coordination with Local Administrative Authority (LAA)

3.3.1.1 The CCCPH requires coordination between VDMMWC and the Local Administrative Authorities (LAAs) in all matters pertaining to cross-connection control.

3.3.1.2 The VDMMWC will provide a copy of this CCC program to LAA via a copy of the VDMMWC's water system plan or in a separate document. The VDMMWC will inform the LAA of any changes in policy or procedure that may impact the LAA.

3.3.1.3 The VDMMWC will provide information to the LAA in a timely manner regarding any:

3.3.1.3.1 Requirement imposed on a residential consumer for the installation of a

DC or an RP on the service, with a description of the cross- connection hazard identified.

3.3.1.3.2 Upgrade of the premise's isolation backflow preventer, i.e., from a DC to an RP;

3.3.1.3.3 Action taken to discontinue water service to a consumer; and

3.3.1.3.4 Backflow incident known by the VDMMWC to have contaminated the public water system or a consumer's plumbing system.

3.3.2 Prohibition of Return of Used Water.

3.3.2.1 The VDMMWC must prohibit the intentional return of used water to the VDMMWC's distribution system per SWRCB's Cross-Connection Control Policy Handbook.

3.3.2.2 Used water is defined as water that has left the control of the VDMMWC. This includes water used for heating and cooling purposes and water that may flow back into the distribution system from consumers with multiple connections.

3.3.2.3 It is the policy of the VDMMWC water system to:

3.3.2.3.1 Prohibit the intentional return of used water to the distribution system by any consumer served by the public water system; and

3.3.2.3.2 Require that all consumers with multiple connections, where the hydraulics permit the potential return of used water, to install a backflow preventer commensurate with the degree of hazard at each point of connection.

3.3.3 Unapproved Auxiliary Supplies.

3.3.3.1 All water supplies other than those owned by the VDMMWC are considered unapproved auxiliary supplies as defined in the SWRCB's CCCPH (or its replacement). The VDMMWC will require backflow protection for consumers with auxiliary supplies on their premises as follows:

3.3.3.1.1 Per Appendix D of the CCCPH (or its replacement), the VDMMWC will require the installation of an RP for premises isolation at the service connection to any consumer having an unapproved auxiliary supply on the premises.

3.3.4 Tanker Trucks.

3.3.4.1 The VDMMWC may allow tanker trucks to obtain water from the VDMMWC's water system under the following conditions:

3.3.4.1.1 The tanker truck is equipped with an approved AG or an approved RP with a current satisfactory inspection or test report.

3.3.4.1.2 The tanker truck will obtain water from VDMMWC-designated watering points only. These watering points are equipped with VDMMWC-installed backflow preventers.

3.3.5 **Temporary Water Connections**.

3.3.5.1 The VDMMWC will not supply water through temporary connections, such as those used for construction projects or main disinfection, except through a backflow preventer arrangement approved by the VDMMWC. The applicant for the temporary connection shall document that the backflow preventer is an approved model and has passed an inspection and/or test within the past 12 months and/or upon relocation, whichever is more recent.

3.4 Relationship to Other Planning and Operations Program Requirements

3.4.1 The VDMMWC will consider the requirements and consequences of the CCC program on the utility's planning and operations requirements. Such considerations include, but are not limited to ensuring:

3.4.1.1 And promoting adequate communication between CCC program personnel and other water utility staff.

3.4.1.2 That adequate training is provided to all staff to recognize potential cross-connection control problems.

3.4.1.3 That cross-connection issues be considered in water quality investigations.

3.4.1.4 That the design of the water distribution system makes adequate provisions for expected head losses incurred through the installation of and experienced by backflow assemblies.

3.4.1.5 That CCC program personnel be consulted in the design of water and wastewater treatment facilities and when proposals are made to receive or distribute reclaimed water.

3.4.1.6 That operations under normal and abnormal conditions do not result in excessive pressure losses; and

3.4.1.7 That adequate financial and administrative resources are available to carry out the CCC program.

4 Abbreviations

AA	Administrative Authority
AB	Assembly Bill
AAHJ	Administrative Authority Having Jurisdiction
AG	Air Gap separation
AHJ	Authority Having Jurisdiction
AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
ANSI	American National Standards Institute
ASSE	American Society of Sanitary Engineering
AVB	Atmospheric Vacuum Breaker
AWWA	American Water Works Association
BPA	Backflow Prevention Assembly
BPAT	Backflow Prevention Assembly Tester (Certified)
BV	Ball Valve
CA-NV AWWA	California-Nevada Section of the American Water Works Association
CCC	Cross-Connection Control
CCCP	Cross-Connection Control Program
CCCPC	Cross-Connection Control Program Coordinator
CCCPH	Cross-Connection Control Policy Handbook
CCCS	Cross-Connection Control Specialist (Certified)
CL	Critical Level
CHSC	California Health and Safety Code
CPC	California Plumbing Code
CW	Cold Water
DC	Double Check backflow prevention assembly
DCDA	Double Check Detector Assembly backflow prevention assembly
DCDA-II	Double Check Detector Assembly Type II backflow prevention assembly
DPH	Department of Public Health
DPW	Department of Public Works
FDA	Food and Drug Administration
FDC	Fire Department Connection
FM	Factory Mutual Global
GIS	Geographic Information System
GPM	Gallons per Minute
GPS	Global Positional System
HBVB	Hose Bib Vacuum Breaker
HC	Hose Connection
HW	Hot Water
IAPMO	International Association of Plumbing and Mechanical Officials
ICC	International Code Council
IPC	International Plumbing Code
IW	Industrial Water
LF	Lead-free
MPR	Meter Protection (in an area of) Recycled Water
MSP	Meter Service Protection
MTR	Meter
NFPA	National Fire Prevention Association

NFSA	National Fire Sprinkler Association
NPW	Non-potable water
NIST	National Institute of Standards and Technology
NRS	Non-rising Stem shutoff valve
OEM	Original Equipment Manufacturer
OS&Y	Outside Stem and Yoke shutoff valve
OSHA	Occupational Safety and Health Administration
PIV	Post Indicator Valve
POC	Point of Connection
POU	Point of Use
PPE	Personal Protective Equipment
PRV	Pressure Reducing Valve
PSI	Pounds per Square Inch
PSIA	Pound per Square Inch Absolute
PSID	Pounds per Square Inch Differential
PSIG	Pounds per Square Inch Gauge
PUC	Public Utilities Commission
PVB	Pressure Vacuum Breaker Assembly backflow prevention assembly
PW	Potable Water
PWS	Public Water System
RO	Reverse osmosis
RP	Reduced Pressure Principle backflow prevention assembly
RPDA	Reduced Pressure Principal Detector Assembly backflow prevention assembly
RPDA-II	Reduced Pressure Detector Assembly Type-II backflow prevention assembly
RPP	Reduced Pressure Principle backflow prevention assembly
RPPA	Reduced Pressure Principle backflow prevention assembly
RPZ	Reduced Pressure Zone
RV	Relief Valve
RW	Recycled Water
SCADA	Supervisory Control and Data Acquisition
SDWA	Safe Drinking Water Act
SOV	Shut Off Valve
SVB	Spill Resistant Vacuum Breaker Assembly backflow prevention assembly
SWRCB	California State Water Resources Control Board
TC	Test Cock
UL	Underwriters' Laboratories, Inc.
UMC	Uniform Mechanical Code
UOM	Units of Measurement
USCFCCCHR	University of Southern California Foundation for Cross-Connection Control and Hydraulic Research

5 Definitions

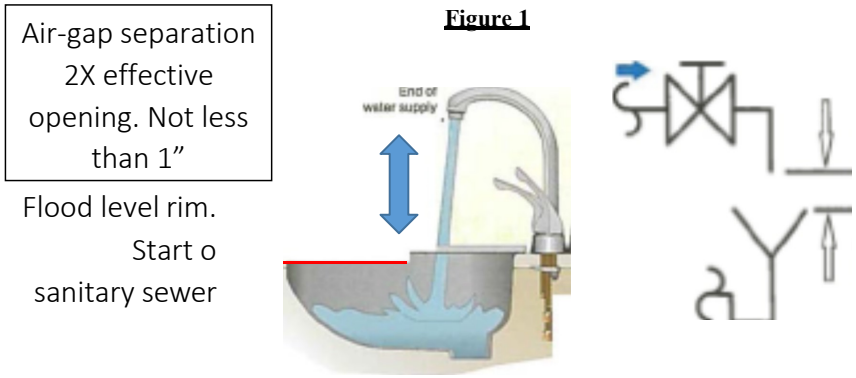
5.1 **Absolute Pressure:** The sum of gauge pressure and atmospheric pressure. Generally measured in pounds per square inch absolute (psia).

5.2 **Accessible:** Capable of being reached for testing and maintenance, when referring to a backflow prevention assembly. However, it first may require the removal of an access panel, door or similar obstruction.

5.3 **Administrative Authority:** The individual official, board, department, or agency established and authorized by a state, county, city or other political entity created by law to administer and enforce the provisions of the Cross- Connection Control Program. Also referred to as Authority Having Jurisdiction.

5.4 **Air Gap (AG) (ANSI A112.1.2):** A physical vertical separation of at least two (2) times the effective opening, as defined in section 207.0 of the California Plumbing Code, 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. See Figure 1.

Figure 1



5.5 **Approved Backflow Prevention Assembly:** An assembly that has been investigated and approved by the Administrative Authority Having Jurisdiction. The approval of backflow prevention assemblies by the administrative authority shall be on the basis of a favorable laboratory and field evaluation report by an approved testing laboratory recommending such approval.

5.6 **Approved Check Valve:** A check valve that is drip-tight in the normal direction of flow when the inlet pressure is at least 1.0 psi (pound per square inch) and the outlet pressure is zero. The check valve shall permit no leakage in a direction reverse to the normal flow: The closure element (e.g., clapper or poppet) shall be internally loaded to promote rapid and positive closure. An approved check valve is only one component of an approved backflow prevention assembly (i.e., pressure vacuum breaker {PVB and SVB}, double check valve assembly {DC} or reduced pressure principle assembly {RP}).

5.7 **Approved Testing Laboratory:** The Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California (USCFCCCHR) or other laboratory having equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies.

5.8 **Approved Water Supply:** Any 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.

5.9 **Aspirator:** A device used for creating suction, specifically by flowing water through a venturi or restricted area of flow. At this restricted area of flow the pressure drops to sub-atmospheric, thus suction is created. Usually a tube is attached at this location for aspiration or suction purposes.

5.10 **Aspirator Effect:** The effect created by an aspirator, restricted area of flow or undersized piping.

5.11 **Atmospheric Pressure:** The pressure (or weight per unit area) exerted by the atmosphere on a surface. At sea level the atmospheric pressure is 14.7 psia (pounds per square inch, absolute).

5.12 **Atmospheric Vacuum Breaker Backsiphonage Prevention Device (AVB) (ASSE 1001):** An assembly containing an air inlet valve, a check seat and an air inlet port(s). (Also known as a non-pressure type vacuum breaker.) The flow of water into the body causes the air inlet valve to close the air inlet port(s). When the flow of water stops the air inlet valve falls and forms a check valve against backsiphonage. At the same time it opens the air inlet port(s) allowing air to enter and satisfy the vacuum. A shutoff valve immediately upstream may be an integral part of the assembly, but there shall be no shutoff valves or obstructions downstream. The assembly shall not be subjected to operating pressure for more than twelve (12) hours in any twenty-four (24) hour period. An atmospheric vacuum breaker is designed to protect against a non-health hazard (i.e., pollutant) or a health hazard (i.e., contaminant) under a backsiphonage condition only. See Figure 2.

Figure 2

5.13 **Auxiliary Water Supply:** Any source of water, other than an approved water supply, that 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.

5.14 **Backflow:** The 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. See terms Backpressure (see 5.16) and Backsiphonage (see 5.17).

5.15 **Backflow Prevention Assembly:** 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. The type of assembly used shall be based on the existing or potential degree of hazard and backflow condition. The types of backflow prevention assemblies include:

- 5.15.1 Atmospheric Vacuum Breaker Backsiphonage Prevention Assembly (see 5.12)
- 5.15.2 Double Check Valve Backflow Prevention Assembly (see 5.33)
- 5.15.3 Double Check Detector Backflow Prevention Assembly (see 5.34)
- 5.15.4 Double Check Detector Backflow Prevention Assembly-Type II (see 5.35)
- 5.15.5 Pressure Vacuum Breaker Backsiphonage Prevention Assembly (see 5.57)
- 5.15.6 Reduced Pressure Principle Backflow Prevention Assembly (see 5.62)
- 5.15.7 Reduced Pressure Principle Detector Backflow Prevention Assembly (see 5.63)
- 5.15.8 Reduced Pressure Principle Detector Backflow Prevention Assembly-Type II (see 5.64)
- 5.15.9 Spill-Resistant Pressure Vacuum Breaker Backsiphonage Prevention Assembly (see 5.69)

5.16 **Backpressure:** Any elevation of pressure in the downstream piping system (by pump, elevation of piping, steam pressure, air 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.

5.17 **Backsiphonage:** A form of backflow due to a reduction in system pressure, which causes a sub-atmospheric pressure to exist in the water system.

5.18 **Certified Backflow Prevention Assembly Tester:** A person who is certified as a backflow prevention assembly tester as defined in the California State Water Resources Control Board's Cross-Connection Control Policy Handbook.

5.19 **Column of Water:** A vertical tube of water usually used to create a specific pressure or used to measure pressure by the elevation of the water in the tube. (A column of water 27 3/ 4 inches (2.31 feet) high generates a pressure of one pound per square inch.)

5.20 **Community Water System:** A public water system that serves at least 15 service connections used by yearlong residents or regularly serves at least 25 yearlong residents of the area served by the system.

5.21 **Consumer:** The owner or operator of an on-site water system(s) having a service from a public potable water system. Consumer includes tenants of single-family dwellings, duplexes, and commercial property, owners of real property, and management companies responsible for property management of real property.

5.22 **Consumer's Potable Water System:** The portion of the privately owned potable water system lying between the point of delivery and the point of use. This system includes all pipes, conduits, tanks, receptacles, fixtures, equipment, and appurtenances used to produce, convey, store or utilize the potable water.

5.23 **Consumer's Water System(s):** Any water system located on the consumer's premises whether supplied by a public potable water system or an auxiliary water supply. The system or systems may be either a potable water system or a non-potable water piping system.

5.24 **Containment Protection: Also referred to as Service Protection:** The terminal end of a service connection from the public potable water system, (i.e., where the water supplier may lose jurisdiction and sanitary control of the water at its 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 mean the downstream end of the water meter.

5.25 **Contaminant / Health Hazard:** Any substance that shall impair the quality of water, in such a way as to create an actual hazard to the public health through poisoning, the spread of disease.

5.26 **Critical Level:** The minimum elevation above the flood level rim of the fixture or receptacle served, downstream piping and water uses on atmospheric vacuum breakers, pressure vacuum breakers and spill-resistant vacuum breakers, at which the unit may be installed. This is indicated by the marking "C-L" or "C/ L." When an AVB, PVB, or SVB does not bear a critical level marking, the bottom of the assembly shall constitute the critical level.

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

5.28 **Cross-Connection:** Any actual or potential connection or structural arrangement between a public water system, including a piping system connected to the public water system and located on the premises of a water user or available to the water user, and any source or distribution system containing liquid, gas, or other substances not from an approved water supply.

5.29 **Cross Connection Control Specialist:** An individual who is certified as a cross-connection control specialist as defined in the California State Water Resources Control Board's Cross-Connection Control Policy Handbook.

5.30 **Direct Cross Connection:** A direct cross-connection is a cross-connection which is subject to both backsiphonage and backpressure.

5.31 **Discontinued Service:** Having the water service turned off by the Water Supplier.

5.32 **Indirect Cross Connection:** An indirect cross-connection is a cross-connection which is subject to backsiphonage only.

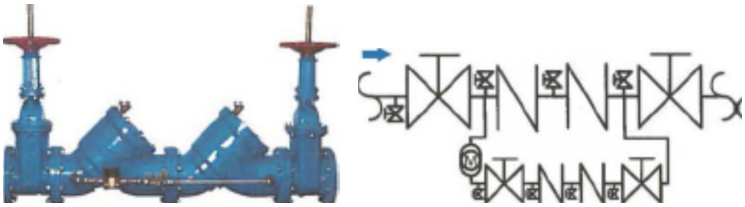
5.33 **Degree of Hazard:** Either a pollutant (non-health hazard) or contaminant (health hazard); derived from the assessment of the materials, which may come in contact with the distribution system through a cross-connection.

5.34 **Double Check Valve Backflow Prevention Assembly (DC) (ASSE 1015):** An assembly composed of 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 a non-health hazard (i.e., pollutant). See Figure 3.

Figure 3

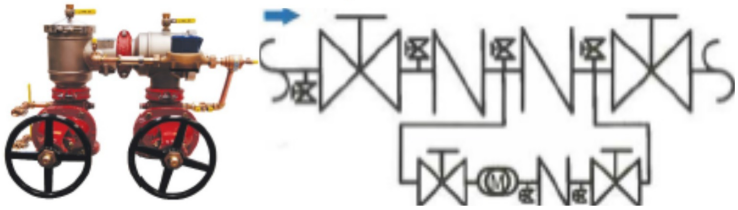
5.35 **Double Check Detector Backflow Prevention Assembly (DCDA) (ASSE 1048):** A specially designed assembly composed of a line-size approved double check valve assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately for rates of flow up to 2 gpm (gallons per minute) and shall show a registration for all rates of flow. This assembly shall only be used to protect against a non-health hazard (i.e., pollutant). The DCDA is primarily used on fire sprinkler systems. See Figure 4.

Figure 4



5.36 **Double Check Detector Backflow Prevention Assembly – Type II (DCDA-II) (ASSE 1048):** 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 a non-health hazard (i.e., pollutant). The DCDA-II is primarily used on fire sprinkler systems. See Figure 5.

Figure 5



5.37 **Gauge Pressure:** The pressure above atmospheric pressure.

5.38 **President:** The President of the Villa del Monte Mutual Water Company VDMMWC/Water Supplier or designee unless otherwise stated or indicated by context.

5.39 **Grey Water:** Wastewater other than toilet contaminated waste. Wastewater generated by kitchen sinks and dish- washers are not considered grey water.

5.40 **Hazard Assessment:** An evaluation of a user premises designed to evaluate the types and degrees of hazard at a user's premises.

5.41 **Health Hazard / Contaminant:** Any substance that shall impair the quality of water, in such a way as to create an actual hazard to the public health through poisoning, the spread of disease, etc.

5.42 **Health Agency:** The health authority having jurisdiction.

5.43 **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 Cross-Connection Control Policy Handbook Appendix D for some examples.

5.44 **Hospital:** Any institution, place, building, or agency which maintains and operates facilities for one or more persons for the diagnosis, care and treatment of human illness, including convalescence and care during and after pregnancy or which maintains and operates organized facilities for any such purpose, and to which persons may be admitted for overnight stay or longer. The term hospital includes sanitarium, nursing home, long term care facility and maternity home.

5.45 **Industrial Fluids:** Any fluid or solution, which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration, which would constitute a hazard if introduced into an approved water supply.

5.46 **Industrial Piping System:** Any system used for transmission of or to 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.

5.47 **Internal Protection / Isolation Protection:** The appropriate type or method of backflow prevention within the consumer's potable water system at the point of use, commensurate with the degree of hazard.

5.48 **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.

5.49 **Manifold Assembly:** An assembly comprised of backflow prevention assemblies (DC or RP) of the same manufacturer, model and size. Manifold adaptor fittings on both the inlet and outlet of the manifold assembly are considered integral components. The size of the manifold assembly is determined by the inlet and outlet connections of the manifold adaptor fittings.

5.50 **Negative Pressure:** Any pressure below atmospheric pressure.

5.51 **Non-health Hazard:** 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. Also referred to as Pollution or a Pollutant.

5.52 **Noncommunity Water System:** A public water system that is not a community water system.

5.53 **Nontransient Noncommunity Water System:** A public water system that is not a community water system and that regularly serves at least 25 of the same persons over six months per year.

5.54 **Parallel Installation:** Two or more backflow prevention assemblies of the same type installed in parallel, having a common inlet, outlet and direction of flow.

5.55 **Plumbing Hazard:** An internal or plumbing type cross-connection in a consumer's potable water system with either a pollutant or contaminant.

5.56 **Point of Delivery:** The terminal end of a service connection from the public potable water system, (i.e., where the water supplier may lose jurisdiction and sanitary control of the water at its 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 mean the downstream end of the water meter. Also referred to as the Service Connection.

5.57 **Pollution/Pollutant:** 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. Also referred to as a Non-Health Hazard.

5.58 **Potable Water:** Water from any source which has been investigated by the health agency having jurisdiction, and has been approved for human consumption.

5.59 **Premise:** Any and all areas on a consumer’s property which are served or have the potential to be served by the Water Supplier’s water system.

5.60 **Premises Containment:** Protection of a public water system’s distribution system from backflow from a user’s premises through the installation of one or more air gaps or BPAs, installed as close as practical to the user’s service connection, in a manner that isolates the water user’s water supply from the public water system’s distribution system.

5.61 **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 or psi.

5.62 **Pressure Fluctuation:** The changes of pressure within a system.

5.63 **Pressure Gradient:** A description of the direction and rate of change of pressure over time.

5.64 **Pressure Vacuum Breaker Backsiphonage Prevention Assembly (PVB) (ASSE #1020):** An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly is to be equipped with properly located resilient seated test cocks and tightly closing resilient seated shutoff valves attached at each end of the assembly. This assembly is designed to protect against a non-health hazard (i.e., pollutant) or a health hazard (i.e., contaminant) under a backsiphonage condition only. See Figure 6.

Figure 6

5.65 **Private Fire Service:** A private fire service main and appurtenances installed in accordance with NFPA 24 on private property and maintained by the property owner for the explicit intent of providing fire flows either through fire hydrants, fire sprinkler systems, or other water-based fire protection systems.

5.66 **Public Water System:** A system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following:

5.66.1 Any collection, treatment, storage, and distribution facilities under control of the operator of the system that are used primarily in connection with the system.

5.66.2 Any collection or pretreatment storage facilities not under the control of the operator that are used primarily in connection with the system.

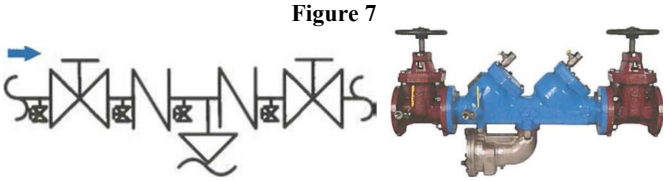
5.66.3 Any water system that treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption..

5.67 **Readily Accessible:** Capable of being reached for testing and/ or maintenance, without the need of removing any access panel, door, or similar obstruction.

5.68 **Reclaimed Water / Recycled Water:** Water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or a controlled use that would not otherwise occur. Reclaimed water is not safe for human consumption. Also referred to as Reused Water.

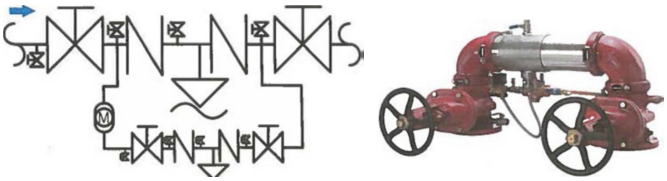
5.69 **Reduced Pressure Principle Backflow Prevention Assembly (RP) (ASSE #1013):** An assembly containing two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and at the same time 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 non-health hazard (i.e., pollutant) or a health hazard (i.e., contaminant). This assembly shall not be used for backflow protection of sewage or reclaimed water. (Note: Check with local administrative authority for acceptable uses.) See Figure 7.

Figure 7



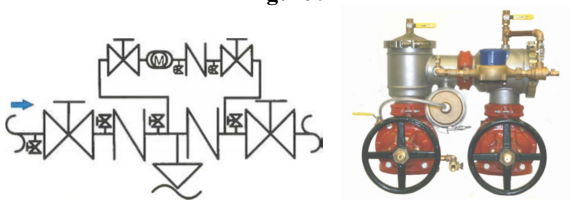
5.70 **Reduced Pressure Principle Detector Backflow Prevention Assembly (RPDA) (ASSE #1047):** A specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a specific bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. 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 non-health hazard (i.e., pollutant) or a health hazard (i.e., contaminant). The RPDA is primarily used on fire sprinkler systems. See Figure 8.

Figure 8



5.71 **Reduced Pressure Principle Detector Backflow Prevention Assembly Type II (RPDA-II) (ASSE #1047):** 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 non-health hazard (i.e., pollutant) or a health hazard (i.e., contaminant). The RPDA-II is primarily used on fire sprinkler systems. See Figure 9.

Figure 9



5.72 **Reused Water:** Water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or a con- trolled use that would not otherwise occur. Reclaimed water is not safe for human consumption. Also referred to as Recycled Water or Reclaimed Water.

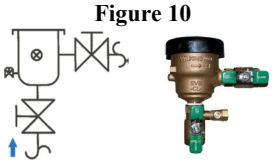
5.73 **Sanitary Sewer:** A system of underground pipes that carries sewage from BPAThrooms, sinks, kitchens, and other plumbing components to a wastewater treatment plant where it is filtered, treated and discharged.

5.74 **Service Connection:** The terminal end of a service connection from the public potable water system, (i.e., where the water supplier may lose jurisdiction and sanitary control of the water at its 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 mean the downstream end of the water meter. Also referred to as the Point of Delivery.

5.75 **Service Protection:** The appropriate type or method of backflow protection at the service connection, commensurate with the degree of hazard of the consumer's potable water system.

5.76 **Spill Resistant Pressure Vacuum Breaker Backsiphonage Prevention Assembly (SVB) (ASSE #1056):** An assembly containing an independently operating internally loaded check valve and independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly is to be equipped with a properly located resilient seated test cock, a properly located bleed /vent port, and tightly closing resilient seated shutoff valves attached at each end of the assembly. This assembly is designed to protect against a non-health hazard (i.e., pollutant) or a health hazard (i.e., contaminant) under a backsiphonage condition only. See Figure 10.

Figure 10



5.77 **State Water Board:** Unless otherwise specified, the State Water Resources Control Board or the local primacy agency having been delegated the authority to enforce the requirements of the CCCPH by the State Water Resources Control Board

5.78 **Static Pressure:** The water pressure in any system under non-flowing conditions.

5.79 **Swivel-Ell:** A reduced pressure principle backflow prevention assembly combined with a changeover piping configuration (swivel-ell connection) designed and constructed pursuant to the SWRCB's CCCPH. See design and construction criteria, as well as Diagrams 9a and 9b, Appendix C of the CCCPH.

5.80 **System Hazard:** An actual or potential threat of severe danger to the physical properties of the public or the consumer's potable water system or of a pollution or contamination, which would have a protracted effect on the quality of the potable water in the system.

5.81 **Thermal Expansion:** The resulting effect when water in a closed system, such as a piping system downstream of a back- flow preventer heats up. In effect, the heat causes the water volume to expand, but since the system is closed, the pressure increases.

5.82 **Transient Noncommunity Water System:** A noncommunity water system that does not regularly serve at least 25 of the same persons over six months per year.

5.83 **Uniform Plumbing Code (UPC)** Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials (IAPMO), the year being the year adopted by the State of California.

5.84 **Used Water:** Any water supplied by a Water Supplier 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 Supplier.

5.85 **User Premises:** The property under the ownership or control of a water user and is served, or is readily capable of being served, with water via a service connection with a public water system.

5.86 **User's Service Connection:** Either the point where a water user's piping is connected to a water system or the point in a water system where the approved water supply can be protected from backflow using an air gap or backflow prevention assembly.

5.87 **User Supervisor/Water Supervisor:** A person designated by a water user to oversee a water use site and responsible for the avoidance of cross-connections.

5.88 **Venturi:** A piping apparatus with a constricted region designed to increase the velocity and thus decrease the pressure of an incompressible fluid in the constricted region.

5.89 **Venturi Effect:** When an incompressible fluid's velocity increases as a result of flowing through a constricted area of piping, the pressure will decrease.

5.90 **Water Supplier:** The public or private owner or operator of the potable water system supplying an approved water supply to the public.

5.91 **Water User:** A person or entity who is authorized by the Public Water System to receive water.