THIS MEETING WILL BE CONDUCTED WITH IN PERSON ATTENDANCE PERMITTED WITH LIMITED CAPACITY IN ACCORDANCE WITH CDHP GUIDELINES, INCLUDING MASK REQUIREMENTS FOR ALL UNVACCINATED INDIVIDUALS ATTENDING IN PERSON. FULLY VACCINATED INDIVIDUALS ARE RECOMMENDED TO CONTINUE INDOOR MASKING WHEN THE RISK MAY BE HIGH. PARTICIPATION WILL ALSO BE AVAILABLE VIA VIDEO CONFERENCE OR TELECONFERENCE.

TO PARTICIPATE IN THE MEETING VIA VIDEO OR TELECONFERENCE, GO TO https://rainbowmwd.zoom.us/j/82580780400 OR CALL 1-669-900-6833 or 1-346-248-7799 or 1- 253-215-8782 or 1-301-715-8592 or 1-312-626-6799 or 1-929-205-6099 (WEBINAR/MEETING ID: 825 8078 0400).

MEMBERS OF THE PUBLIC WISHING TO SUBMIT WRITTEN COMMENT TO THE COMMITTEE UNDER PUBLIC COMMENT OR ON A SPECIFIC AGENDA ITEM MAY SUBMIT COMMENTS TO OUR BOARD SECRETARY BY EMAIL AT DWASHBURN@RAINBOWMWD.COM OR BY MAIL TO 3707 OLD HIGHWAY 395, FALLBROOK, CA 92028. ALL WRITTEN COMMENTS RECEIVED **AT LEAST ONE HOUR IN ADVANCE OF THE MEETING** WILL BE READ TO THE COMMITTEE DURING THE APPROPRIATE PORTION OF THE MEETING. THESE PUBLIC COMMENT PROCEDURES SUPERSEDE THE DISTRICT'S STANDARD PUBLIC COMMENT POLICIES AND PROCEDURES TO THE CONTRARY.

COMMUNICATIONS AND CUSTOMER SERVICE COMMITTEE MEETING

RAINBOW MUNICIPAL WATER DISTRICT
Thursday, March 3, 2022
Communications and Customer Service Committee Meeting - Time: 3:30 p.m.

District Office	**3707 Old Highway 395**	**Fallbrook, CA 92028**

Notice is hereby given that the Communications and Customer Service Committee will be holding a regular meeting beginning at 3:30 p.m. on Thursday, March 3, 2022.

AGENDA

1. **CALL TO ORDER**

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL: Bill Shute (Chair) _____ Russell Vernon (Vice Chair) _____**

   Members: Hayden Hamilton _____

   Alternates: Cynthia Gray_____

4. **INSTRUCTIONS TO ALLOW PUBLIC COMMENT ON AGENDA ITEMS FROM THOSE ATTENDING THIS MEETING VIA TELECONFERENCE OR VIDEO CONFERENCE**

   CHAIR TO READ ALOUD *- "If at any point, anyone would like to ask a question or make a comment and have joined this meeting with their computer, they can click on the "Raise Hand" button located at the bottom of the screen. We will be alerted that they would like to speak. When called upon, please unmute the microphone and ask the question or make comments in no more than three minutes.*

   *Those who have joined by dialing a number on their telephone, will need to press *6 to unmute themselves and then *9 to alert us that they would like to speak.*

   A slight pause will also be offered at the conclusion of each agenda item discussion to allow public members an opportunity to make comments or ask questions."

5. SEATING OF ALTERNATES

6. ADDITIONS/DELETIONS/AMENDMENTS TO THE AGENDA (Government Code §54954.2)

7. PUBLIC COMMENT RELATING TO ITEMS NOT ON THE AGENDA (Limit 3 Minutes)

***8. APPROVAL OF MINUTES**
A. February 3, 2022

9. GENERAL MANAGER COMMENTS

10. COMMITTEE MEMBER COMMENTS

***11. REVIEW OF PROPOSED CHANGES TO ADMINISTRATIVE CODE CHAPTER 8.20 – CROSS-CONNECTION CONTROL INCLUDING BACKFLOW NOTIFICATIONS (OPERATIONS)**

12. SHUTOFF FOR NON-PAYMENT UPDATE

13. COVID-19 UPDATE

14. CUSTOMER SURVEY UPDATE

15. COMMITTEE MEMBER RECRUITMENT

16. SDCWA SHUTDOWN UPDATE

17. EMERGENCY NOTIFICATION ANALYTICS UPDATE INCLUDING PROGRESS AND ENHANCEMENTS

18. COMMUNITY EVENT PARTICIPATION IDEAS (AVOCADO FESTIVAL/VINTAGE CAR SHOW)

19. CONSIDERATION OF A PUBLIC RELATIONS PIECE FOCUSED ON INTERAGENCY COOPERATION (RECENT UNPRECEDENTED LEAKS/HELI-HYDRANT INSTALLATION)

20. PUBLIC COMMUNICATIONS AND RELATED MEDIA STORIES

21. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT SCHEDULED COMMUNICATIONS AND CUSTOMER SERVICE COMMITTEE MEETING

22. ADJOURNMENT

ATTEST TO POSTING:

Pam Moss	2-24-22 @ 4:30 p.m.
Pam Moss Secretary of the Board	Date and Time of Posting Outside Display Cases

MINUTES OF THE COMMUNICATIONS AND CUSTOMER SERVICE COMMITTEE MEETING OF THE RAINBOW MUNICIPAL WATER DISTRICT FEBRUARY 3, 2022

1. CALL TO ORDER – The Communications and Customer Service Committee Meeting of the Rainbow Municipal Water District on February 3, 2022, was called to order by Chairperson Shute at 3:30 p.m. in the Board Room of the District, 3707 Old Highway 395, Fallbrook, CA 92028. *(This meeting was held with limited in-person attendance following County and State COVID guidelines as well as virtually.)* Chairperson Shute presiding.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL:

Present: Member Hamilton *(via video conference),* Member Shute *(via video conference)*, Member Vernon *(via video conference)*.

Absent: General Manager Kennedy.

Also Present: Executive Assistant Washburn.

Also Present Via Teleconference or Video Conference:

Alternate Gray, Finance Manager Largent, Information Technology Manager Khattab, Information Systems Specialist Espino.

Two members of the public were present via teleconference or video conference.

4. INSTRUCTIONS TO ALLOW PUBLIC COMMENT ON AGENDA ITEMS FROM THOSE ATTENDING THIS MEETING VIA TELECONFERENCE OR VIDEO CONFERENCE

Mr. Shute read aloud the instructions for those attending the meeting via teleconference or video conference.

5. SEATING OF ALTERNATES

There were no alternates seated.

6. ADDITIONS/DELETIONS/AMENDMENTS TO THE AGENDA (Government Code §54954.2)

There were no amendments to the agenda.

7. PUBLIC COMMENT RELATING TO ITEMS NOT ON THE AGENDA (Limit 3 Minutes)

There were no public comments.

***8. APPROVAL OF MINUTES**

A. January 6, 2022

Motion:

To approve the minutes.

Action: Approve, Moved by Member Hamilton, Seconded by Member Shute.

Vote: Motion carried by unanimous roll call vote (summary: Ayes = 3).

Ayes: Member Hamilton, Member Shute, Member Vernon.

9. GENERAL MANAGER COMMENTS

There were no comments.

10. COMMITTEE MEMBER COMMENTS

Mr. Vernon shared what he has experienced with trying to downsize his meter and how he was informed his request for a variance would need to go to the Board for consideration. Mr. Hamilton noted this was a standard procedure for these types of requests. Discussion ensued.

Mr. Vernon inquired as to how far his Flume device can communicate. Discussion ensued.

11. COVID-19 UPDATE

Ms. Gray shared the information Ms. Harp reported to staff noting there was 17% of the workforce quarantined all at once a few weeks ago with most being in contact with someone who has tested positive. She stated the District was down to two employees currently still in quarantine who would be returning soon. She reported the lobby will be reopening on February 7, 2022.

Discussion ensued regarding RMWD's COVID-19 tracking system.

12. DISCUSSION REGARDING PROPOSED AMENDMENTS TO ADMINISTRATIVE CODE CHAPTER 8.20 – BACKFLOW INCLUDING BACKFLOW NOTIFICATIONS

Ms. Largent explained although there would not be a presentation of the proposed changes today, staff wanted to notify the committee members that proposed revisions will be provided to the committee members ahead of the next meeting in preparation for further discussion anticipated at the March committee meeting.

Mr. Hamilton suggested there be something specified in the policies regarding notifying the customers they are responsible for making the backflow devices accessible as well as when the devices are not.

13. CUSTOMER SURVEY UPDATE

Ms. Gray stated she has been proactively working with Survey Monkey while waiting to see if the District's current merchant can provide the surveys desired. She mentioned some of the questions she has prepared that will start going out via email following staff conversations with the customers.

Mr. Shute inquired if the survey will be telephonic or an email-type survey. Ms. Gray stated it was her hope it will be via email as well as possibly text messages based on the customer contact information staff has on record.

Mr. Shute encouraged staff to pick the questions lightly as well as keep them consistent. He stated having core basic questions that will always be used would be best.

Ms. Gray noted these surveys will also be able to be used very proactively as all of the emails that come into the website will have staff's responses attached.

14. EMERGENCY NOTIFICATION ANALYTICS UPDATE

Ms. Gray reported it was discovered there was a bit of a hiccup with the transfer of information; however, once this is resolved, the current numbers will increase. She said she will have another update at the March committee meeting.

Mr. Hamilton inquired if there will be a test conducted of the current data set against the pending shutdown of Aqueduct 4. Ms. Largent explained due to this being a SDCWA scheduled shutdown as opposed to an emergency, the District has plans in place to prepare for the shutdown to ensure there is no interruption of water service to the customers; therefore, an emergency notification may not be necessary for this scenario. Discussion ensued.

15. DISCUSSION REGARDING COMMITTEE MEMBER RECRUITMENT

Mr. Shute stated although he has been actively recruiting for more committee members since December; however, it has been to no avail. He inquired as to whether anyone had any ideas for ramping up recruitment.

Ms. Washburn reported the newsletter was effective in recently generating interest from a member of the public to serve on the Engineering and Operations Committee.

Mr. Hamilton asked if there was a constant campaign for committee recruitment in the District newsletters. Ms. Gray stated a campaign is published bi-monthly.

Mr. Shute mentioned there were prior discussions regarding getting something published in the local newspaper. Ms. Gray offered to draft something for possible release in The Village News.

Mr. Shute and Mr. Hamilton shared how each of them became interested in serving on this committee. Discussion followed.

Mr. Vernon suggested Mr. Shute write a testimonial for publishing in an edition of the RMWD newsletter.

16. CONSIDER APPROVAL OF LIFT STATION 1 PROJECT LOGO

Ms. Gray shared the proposed logo. Ms. Largent stated it looked very basic. Ms. Gray said with the logo, there is information with the name of the project.

Ms. Gray reported the signage has already been completed with a blank space in which the logo can be added. She noted the QR code has already been created, the information is on the District's website which will be continually updated, and how there will be placement for four different signs.

Mr. Hamilton inquired as to multiple logo choices. Ms. Gray explained she and Mr. Kennedy had settled on the proposed logo. Mr. Shute asked for examples as to how this would be used. Ms. Gray displayed a sample of what it would look like on the signage.

Mr. Shute inquired as to whether a press release will be published regarding this pump station as to the project being an enhancement. Mr. Hamilton pointed out this was a capital improvement project for which RMWD was not well known for doing, so it may be beneficial to communicate it better to the public. Ms. Largent explained there will be a sign at the site and that the article and map being published in the District's newsletter could also be submitted for a press release.

Mr. Hamilton provided an update on the Water Service Upgrade Project (WSUP), noting it was anticipated by Mr. Gutierrez that the project will be completed within the next week in terms of the standard replacements with some work remaining on those meters that were kicked back.

Mr. Vernon pointed out the context provided in the sample Ms. Gray displayed looked better; however, there was no indication this was a sewer project. Ms. Largent noted it should say "Lift Station" as opposed to "Pump Station". Mr. Hamilton recommended it be posted as a sewer project. Mr. Shute suggested there be language explaining the project was to increase sewer capacity, etc. Ms. Largent stated she liked the idea of "your dollars at work".

Ms. Gray clarified when discussing the signage for this project with Mr. Kennedy, it was determined pump station was what was settled upon and why. Discussion followed.

Mr. Shute stated he liked what was being proposed in context; however, he would recommend adding words around it. Ms. Gray pointed out this would be utilized very much like the WSUP signage with the ability to provide updates.

Mr. Hamilton suggested it would be better to identify this as a wastewater station as opposed to sewage or a pump station. Mr. Shute and Mr. Vernon agreed with it being made clear that this project is for waste as opposed to water. Ms. Gray asked for clarification as to how this be identified. Mr. Shute explained next to the logo in whatever copy it is placed. Ms. Gray offered to try to add something within the logo related to this being a wastewater project; however, the signs were already done, and how difficult it was to get down to as few words as possible while ensuring it was understood this project was for Thoroughbred Lane.

Mr. Shute expressed concern with this committee being presented with a logo for which approval was being considered. Ms. Gray understood the concern noting she was brought in at the last minute and did her best to work with what was presented. Mr. Hamilton stated in Ms. Gray's defense, this project was in the works for several years and how the hold up has been in the easements. He stated now that the easements have been cleared, engineering moved very quickly as opposed to sitting back and waiting. Mr. Shute stated the process should include a checklist to allow time for review and input prior to something going out.

17. PUBLIC COMMUNICATIONS AND RELATED MEDIA STORIES

Mr. Shute inquired as to whether Mr. Kennedy emailed the article from the Union Tribune to the committee members. Ms. Largent offered to share the article with the committee in the event Mr. Kennedy had not done so.

Mr. Shute recommended the committee have a steady beat of public communications that RMWD can offer up to local media on a quarterly basis and possibly have an annual calendar on which to reflect. Ms. Largent agreed this could be streamlined with the monthly District newsletter adding a process to send some of the newsletter articles to the local media.

Ms. Gray announced the Avocado Festival would be taking place on April 24, 2022, and the Vintage Car Show will take place at Bates Nut Farm in Valley Center on May 29, 2022. She encouraged anyone interested in assisting was welcome to join staff at either event.

Mr. Hamilton noted there may be a great interest in updates on the detachment efforts.

Mr. Vernon suggested informational flyers be provided as handouts. Mr. Shute recommended adding something about volunteering on the committees. Ms. Gray proposed the idea of handing out postcards with QR codes to the website. Mr. Hamilton liked the idea of providing a self-addressed postcard idea where customers could put their contact information on it, add a stamp, and place it in a mailbox. Mr. Shute added possibly having a drop box available would be helpful as well.

Mr. Shute offered to prepare cheat sheets related to booth training as well as give a brief training presentation to help maximize RMWD's benefits when working on these events. Ms. Gray suggested having Mr. Shute come into the District and have Mr. Khattab record the training presentation.

18. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT SCHEDULED COMMUNICATIONS AND CUSTOMER SERVICE COMMITTEE MEETING

It was noted an update on shutoffs for non-payment, COVID-19, customer surveys, committee member recruitment, the SDCWA shutdown, emergency notification analytics including any progress and enhancements, as well as community event participation ideas, consideration of a possible public relations piece focused on interagency cooperation, and backflow policy updates should be on the next committee agenda.

19. ADJOURNMENT

The meeting was adjourned by Chairperson Shute.

The meeting adjourned at 4:37 p.m.

_____
Bill Shute, Committee Chairperson

_____
Dawn M. Washburn, Board Secretary

RAINBOW MUNICIPAL WATER DISTRICT
Committed to Excellence

BOARD ACTION

BOARD OF DIRECTORS

March 22, 2022

SUBJECT

DISCUSSION AND POSSIBLE ACTION TO ADOPT ORDINANCE NO. XX-XX AMENDING AND UPDATING ADMINISTRATIVE CODE SECTION 8.20.010.01 CROSS-CONNECTION CONTROL POLICY

BACKGROUND

The California Code of Regulations (CCR) requires public water systems to protect water supplies from contamination by implementing a cross-connection control program. The scope of a comprehensive cross-connection control program must include provisions for the protection of the drinking water supply through the installation of appropriate backflow prevention assemblies at all water users' connections where a hazard or potential hazard to the water supply is identified by the public water system.

The Water Supplier shall protect the public water supply from contamination by the implementation of a cross-connection control program; the program, or any portion thereof, may be implemented directly by the water supplier or by means of a contract with a local health agency, or with another agency approved by the health agency.

(a) *The adoption of operating rules or ordinances to implement the cross-connection program.*
(b) The conducting of surveys to identify water user premises where cross-connections are likely to occur.
(c) The provisions of backflow protection by the water user at the user's connection or within the user's premises or both.
(d) The provision of at least one person trained in cross-connection control to carry out the cross-connection program.
(e) The establishment of a procedure or system for testing backflow preventers.
(f) The maintenance of records of locations, tests, and repairs of backflow preventers.

(Title 17, Section 7584).

DESCRIPTION

A cross-connection is created when drinking water piping connects the various plumbing fixtures in businesses or homes. If improperly protected, contamination can result when a backflow event occurs, allowing contaminants to reverse flow from the fixture and equipment to the drinking water supply. A backflow prevention device protects potable water supplies from contamination or pollution due to backflow. The cross-connection control technician administers the cross-connection control program. Staff has reviewed Administrative Code Chapter 8.20 and determined that amendments and updates to the Code are essential to ensure public health. This update clarifies that testing is mandatory. The update also defines the responsibilities of both RMWD and the homeowner. Below is a list of the proposed amendments:

8.20.010.02.1 - Legal Authority: Adds plainly worded language to legal authority.

8.20.010.03 - Definitions: Adds verbiage to the definition for health hazard; added definitions include “passive purge” and “Pressure Vacuum Breaker Assembly.”

8.20.010.04 - Cross-Connection Protection Requirements: Adds a general provision section which further defines where protection is required, types of protection required, and Table 1 for clarification.

8.20.010.51 - Approved Backflow Prevention Assemblies: Defines in detail types of assemblies removing the vagueness of the previous code.

8.20.010.05.3 - Backflow Prevention Assembly Testing and Maintenance: Clarifies that testing is the responsibility of RMWD and mandatory. Clearly states what staff is responsible for and what the homeowner is responsible for.

8.20.010.07.01 - Water Service Termination: Deletes previous single paragraph from the old version and adds detailed conditions for water service termination.

8.20.010.09 – User Supervisor: Replaces “Systems to be Open for Inspection, Installation, and Testing” section.

8.20.100, 8.20.110, 8.20.120, 8.20.130, 8.20.140, 8.20.150, and 8.20.160: Removed in their entirety.

POLICY/STRATEGIC PLAN KEY FOCUS AREA

Strategic Focus Area Two: Asset Management
Strategic Focus Area Four: Fiscal Responsibility
Strategic Focus Area Five: Customer Service

ENVIRONMENTAL

In accordance with CEQA guidelines Section 15378, the action before the Board does not constitute a “project” as defined by CEQA, and further environmental review is not required at this time.

BOARD OPTIONS/FISCAL IMPACTS

1) Adopt Ordinance No. XX-XX amending and updated Administrative Code Section 8.20.010.01 as presented.
2) Adopt Ordinance No. XX-XX amending and updating Administrative Code Section 8.20.010.01 with revisions.
3) Deny adoption of Ordinance No. XX-XX and provide staff with direction.

STAFF RECOMMENDATION

Staff supports direction.

Robert Gutierrez 03/22/2022
Operations Manager

Section 8.20.010
Cross-Connection Control Policy

8.20.010.01 Purpose

The purpose of this policy~~chapter~~ is to:

A. ~~To p~~Protect the District system from the possibility of contamination or pollution, by isolating within customer systems such contaminants or pollutants that have the potential to backflow into the District's potable water system; and

B. ~~To p~~Provide for an ongoing program of cross-connection control which will systematically and effectively prevent the contamination or pollution of the District's potable water system; and

C. Meet or exceed Federal and State regulations pertaining to cross-connection control issues.

8.20.010.02~~20~~ Legal Basis and Authority ~~Basis~~ for Program

~~All legal authorities and references shall be current versions and revisions.~~

~~**Authority**~~

~~**1.** Code of Federal Regulations, Safe drinking Water Act - most current~~

~~**2.** Code of California Regulations, Titles 17 and 22~~

~~**3.** State of California Water Code, Chapter 1, Section 110. Chapter 8, Section 500 and Chapter 723, Sections 13553, 13554.2, and 13554.3~~

~~**4.** American Water Works Association Manual of Water Supply Practices M14~~

~~**5.** University of Southern California (USC Manual) – latest or current edition~~

~~**6.** California Plumbing Code (CPC)~~

~~**7.** Rainbow Municipal Water District Administrative Code~~

8.20.010.02.1 Legal Basis

All legal authorities and references shall be current versions and revisions.

1. The purpose of this ordinance is to protect the public water supply against actual potential cross-connection by isolating within the premise contamination that may occur because of some undiscovered or unauthorized cross-connection on the premises.

2. To eliminate existing connections between drinking water systems and other sources of water that are not approved as safe and potable for human consumption.

3. To eliminate cross-connections between drinking water systems and sources of contamination.

4. To prevent the making of cross-connections in the future.

5. To maintain the backflow prevention program by administering an inspection and testing program of backflow prevention assemblies installed at the meter.

These regulations are adopted pursuant to the state of California Code of Regulations, Title 17, Public Health entitled "Regulations Relating to Cross-Connections." It is unlawful for any person, firm, or corporation at any time to make or maintain or cause to be made or maintained, temporarily or permanently, for any period of time whatsoever, any cross-connection between plumbing pipes or water fixtures being served with water by the District water department and any other source of water supply to maintain any sanitary fixture or other source of water supply or to maintain any sanitary fixture or other appurtenances or fixtures which by reason of their construction may cause or allow backflow of water or other substances into the water supply system of the District and/or the service of water pipes or fixtures of any consumer of the District.

8.20.010.02.2 Authority

1. Code of Federal Regulations, Safe drinking Water Act - most current

2. Code of California Regulations, Titles 17 and 22

3. State of California Water Code, Chapter 1, Section 110. Chapter 8, Section 500 and Chapter 723, Sections 13553, 13554.2, and 13554.3

4. American Water Works Association Manual of Water Supply Practices M14

5. University of Southern California (USC Manual) – latest or current edition

6. California Plumbing Code (CPC)

7. Rainbow Municipal Water District Administrative Code

8.20.010.0303 Definitions

Whenever in this chapter or in any document where they govern, the following terms are used, they shall be defined as follows:

"Air-Gap" is a means of backflow prevention utilizing the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the flood level rim of said vessel. An approved air-gap shall be at least double the diameter of the supply pipe, measured vertically, above the top of the rim of the vessel; provided however, that in no case shall the air-gap be less than one inch.

"Approved" means accepted by the District as meeting an applicable specification stated or cited in this chapter suitable for the proposed use.

"Auxiliary Water Supply" means any water supply, other than the District's system available to a customer system. These auxiliary supplies may include water from other purveyor's public potable water supply or any natural source(s) such as a well, spring, river, stream, harbor, etc., or used waters or industrial fluids. These waters may be polluted or contaminated, or they may be objectionable, and constitute an unacceptable water source over which the District does not have control.

"Agricultural Properties" is a parcel, lot, grove or residence of any size which is used for an agrarian nature, whether for commercial purposes or not. Typical uses would include, but not be limited to, the practice of cultivating crops, the breeding and raising of livestock, aquaculture and any other form of husbandry.

"Backflow" means the reversal of flow of water or mixtures of water and other liquids, gases or other substances into the District's distribution pipes of water from any source or sources.

"Backflow Preventer" means a device or means designed to prevent backflow or backsiphonage.

"Backpressure" means any elevation of pressure in the downstream piping system (by pump, elevation of piping, or steam and/or air pressure) above the supply pressure at the point of consideration, which would cause, or tend to cause, a reversal of the normal direction of flow.

"Backsiphonage" means the flow of water (or other liquids, mixtures or substances) into the District system from any source caused by the reduction of pressure in the District system.

"Board" means Board of Directors of the Rainbow Municipal Water District.

"Certified Backflow Tester" means a person who has proven their ability to test backflow prevention assemblies to the satisfaction of the District and the San Diego County Department of Environmental Health.

"Contamination" means the impairment of the quality of the potable water by sewage, industrial fluids, waste liquids or any other compounds or other materials to a degree which creates an actual hazard to the public health through poisoning or the spreading of disease.

"Control" means the right and power over the quality of water.

"Cross-Connection" means any physical connection, or arrangement of piping or fixtures, between two otherwise separate piping systems, one of which contains potable water and the other of which contains nonpotable water, industrial fluids, or fluids of questionable safety, through which, or because of which, backflow may occur into the District's system. A water service connection between the District system and a customer system which is cross-connected to a contaminated fixture, industrial fluid system or with a potentially contaminated supply or auxiliary water system, constitutes one type of cross-connection. Other types of cross-connections include connectors such as swing connections, removable sections, four-way plug valves, spools, dummy sections of pipe, swivel or change-over devices, sliding multiport tubes, solid connections, garden hoses, etc.

"Cross-Connection Control by Containment" means the installation of an approved backflow prevention device in any customer system chosen as practical for the water service connection.

"District" means Rainbow Municipal Water District.

"Double Check-Detector Backflow Prevention Assembly" (DCDA) means 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 accuracy for only very low rates of flow up to 3 GPM.

"Double Check Valve Backflow Prevention Assembly" an assembly composed of two (2) independently acting, approved check valves, including tightly closing resilient seated shut-off valves attached at each end of the assembly and fitted with properly located resilient seated test cocks.

"Health Hazard" means any condition, device or practice in the customer system, or its operation, which endangers, or in the judgment of the District, has the potential to endanger the health and well-being of any water customer.

"Industrial Fluids System" means any system containing a fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollution or plumbing hazard if introduced into the District system.

"Locked-off" means any water service which has been shut off at the meter by the District.

"Manager" means General Manager of the Rainbow Municipal Water District or their authorized representative.

"Nonpotable Water" means water which is not safe for human consumption or which is of questionable potability.

"Plumbing Hazard" means an internal or plumbing type cross-connection in a customer/user's potable water system that may be either a pollution or a contamination-type hazard.

"Pollution" means the presence of any foreign substance (organic, inorganic or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.

"Pollution Hazard" means an actual or potential threat to the physical properties, or to the potability, of the District system, which would constitute a nuisance or be aesthetically objectionable or could cause damage to the District system, but would not be dangerous to health.

"Potable water" means any water which, according to recognized standards is safe for human consumption.

"**Potable water service connection"** means the terminal end of a service connection from the District system (where the District loses control over the water at its point of delivery to the customer system), being the downstream end of the meter. There should be no unprotected tees/take-offs from the service line upstream of any backflow prevention device. Service connections shall also include temporary connections from a fire hydrant and all other temporary or emergency water service connections from the District system.

"Public Health Agency" means the State Water Resources Control Board or other relevant authority having jurisdiction.

"Reduced Pressure Principle Device" (RP) means a backflow prevention device consisting of an assembly of two independently operating approved check valves with an automatically operating differential relief valve between the two check valves, tightly closing shut-off valves on either side of the check valves, plus properly located test cocks for the testing of the check and relief valves. The entire assembly shall meet the design and performance specifications and approval of a recognized and approved testing agency for backflow prevention assemblies. The device shall operate to maintain the pressure in the zone between the two check valves at a level less than the pressure of the inlet device. At cessation of normal flow, the pressure between the two check valves shall be less than the pressure at the inlet of the device. In case of leakage of either of the check valves, the differential relief valve shall operate to maintain the reduced pressure in the zone between the check valves by discharging to the atmosphere. When the inlet pressure is two pounds per square inch or less, the relief valve shall open to the atmosphere. To be approved, these devices must be readily accessible for inline maintenance and testing and be installed in a location where no part of the device will be submerged.

"Reduced Pressure Principle-Detector Backflow Assembly (RPDA)" means a specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter

~~shall register for only very low rates of flow up to 3 GPM and shall show a registration for all rates of flow.~~

~~**"Residential Properties"** is a parcel or lot with at least one residence regardless of the lot size, with a primary purpose of providing a dwelling that serves as living quarters for one or more families and does not meet the definition of an "Agricultural Property".~~

~~**"Title 17"** means California Code of Regulations, Title 17, Public Health Regulations relating to cross-connection.~~

~~**"Unlocked"** means any water service previously shut off by the District which has been turned back on by the District.~~

~~**"Used Water"** means any water supplied by the District from the District system to a customer system that has passed through the metered water service connection and is no longer under the control of the District.~~

~~**"Water System"** The water system is made up of two parts; namely, the District system and the customer systems:~~

~~The District system consists of the storage, treatment and distribution facilities under the complete control of the District, up to the point where the customer system begins (immediately after the water meter).~~

~~The customer systems consist of all water components beyond the water meter.~~

For the purposes of this policy, the following words and phrases have the following meanings:

"ABPA": American Backflow Prevention Association.

"ASSE": American Society of Sanitary Engineers.

"AWWA": American Water Works Association.

"Air-Gap Separation": A physical break between a supply pipe and a receiving vessel. The airgap shall be at least double the diameter of the supply pipe measured vertically above the top rim of vessel, no less than one inch.

"Approved Backflow Prevention Assembly": An assembly or physical separation that has been designed specifically for preventing the backflow of water/liquid, gas from entering the system, which has passed laboratory and field evaluation tests performed by a recognized testing organization which has demonstrated their competency to the California Department of Health Services.

"Approved Water Supply": Any water supply whose potability is regulated by a state or local health agency.

"Auxiliary Supply": Any water supply on or available to the premises other than the District water supply.

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

"Backflow": A flow condition, caused by a differential in pressure, that causes the flow of water or other liquids, gases, mixtures, or substances into the distributing pipes of a potable supply of water from any source other than an approved water supply. Back siphonage or back pressure are causes of backflow.

"Consumer's Water System": Is defined as and includes all facilities beyond the service meter. The system or systems may include both potable and non-potable water systems.

"Contamination": A degradation of the quality of the potable water by any foreign substance which creates a hazard to the public health, or which may impair the usefulness or quality of the water.

"Cross-Connection": As used in this chapter, is any unprotected actual or potential connection between a potable water system used to supply water for drinking purposes and any source or system containing unapproved as safe, wholesome, and potable. Bypass arrangements, jumper connections, removable sections, swivel or changeover assemblies, or other assemblies through which backflow could occur, shall be considered to be cross-connections.

"Cross-Connection Specialist": A person by title or designated by the General Manger who ensures all service connections are protected by approved backflow devices or by abating and eliminating cross connections.

"District": Rainbow Municipal Water District.

"District Water System": The source facilities and distribution system under the control of the District of Oceanside Water Utilities Department up to and including the meter.

"Double Check Detector Check Assembly (DCDA)": A backflow prevention assembly consisting of a line size double check valve assembly in parallel with a detector meter and water size double check valve assembly. Each double check valve assembly is to be equipped with property located test cocks and a tightly closing shut-off valve at the end of the assembly.

"Double Check Valve Assembly (DCA)": An assembly of at least two independently acting check valves including tightly closing shut-off valves on each side of the check valve assembly and test cocks available for testing the water tightness of each check valve.

"Dual Check Valve Device (DC)": A line dual check valve that is installed immediately after the water meter on residential services. This device is non testable.

"Degree of Hazard": Is derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

1. **"Health Hazard"** is any condition, assembly, or practice in the water supply system and its operation which could create, or in the judgment of the division, county, or state health official, may create a danger to the health and well-being of the water consumer.

2. **"Plumbing Hazard"** is a type of plumbing cross-connection in a consumer's potable water system that has not been properly protected by an approved airgap or approved backflow prevention assembly.

3. **"Pollution Hazard"** is an actual or potential threat to the physical properties of the water system or to the potability of the public or the consumer's potable water system, but which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances but would not be dangerous to health.

4. **"System Hazard"** is an actual or potential threat of severe damage to the physical properties of the public potable water system of 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.

"Health Agency": Refers to the California Department of Health Services.

"Local Health Agency": Refers to the County of San Diego Department of Environmental Health.

"Passive Purge": Refers to a type of fire sprinkler system that serves all toilets in addition to fire sprinklers, allowing water to circulate throughout the entire system on a regular basis and, therefore, avoiding stagnation.

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

"Pollution": The presence of any foreign substance (organic, inorganic, or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health, but which does adversely and unreasonably affect such waters for domestic use.

"Premises": Any and all areas on a customer's property which are served or have the potential to be served by the public water system.

"Pressure Vacuum Breaker (PVB) Assembly": Refers to a backflow prevention assembly containing a spring loaded check valve and a spring

loaded air-inlet valve which opens when the pressure approaches atmospheric. The unit shall include two tightly closing shut-off valves located at each end of the assembly and two test cocks properly located for testing the device. Can be used for internal protection but NOT meter protection.

"Public Water System": A system for the provision of piped water to the public for human consumption which has five or more service connections or regularly serves an average of twenty-five (25) individuals daily at least sixty (60) days out of the year.

"Rainbow Municipal Water District": RMWD.

"Reclaimed Water": A wastewater which as a result of treatment is suitable for uses other than potable use.

"Recycled Water": See Reclaimed Water.

"Reduced Pressure - Detector Check Assembly (RPDCA)": A backflow prevention assembly consisting of a line-size reduced pressure principal assembly in parallel with a detector meter and meter-size reduced pressure principal assembly. Each reduced pressure principal assembly is to be equipped with properly located test cocks and a tightly closing shut-off valve at each end of the assembly.

"Reduced Pressure Principal Backflow Prevention Assembly (RPA)": An assembly incorporating two or more check valves and an automatically operating differential relief valve located between the two checks, a tightly closing shut-off valve on each side of the check valve assembly and equipped with necessary test cocks for testing.

"Service Connection": Refers to the point of connection of a user's piping to the District's facilities.

"User Supervisor": Refers to the person on site and who is responsible for the monitoring of the backflow prevention devices and for the avoidance of cross-connections

"Water User": Any person obtaining water from an approved water supply system.

8.20.010.0404 Cross-Connection Protection RequirementsDegree of Hazard

~~The District's Cross-Connection Control Specialist will evaluate the degree of potential health hazard to the public water supply as a result of conditions existing on a customer/user's premises. The Cross-Connection Control Specialist will consider the following as a non-exclusive basis for determining if a hazard exists or has the potential to exist:~~

~~The existence of an actual cross-connection;~~
~~The nature of material handled on the property;~~

~~The probability of a backflow occurring;~~
~~The degree of piping system complexity and the potential for system modification.~~

~~Commercial:~~

~~All meters serving commercial properties are required to have District approved backflow devices installed.~~

~~Agricultural:~~

~~All meters serving Agricultural Properties are required to have District approved backflow devices installed.~~

~~Residential:~~

~~A backflow device would not be required unless one or more of the following conditions apply:~~

- ~~Pressure in the customers system that may exceed the water pressure in the District system (onsite pumps, elevation, etc.)~~
- ~~Auxiliary water system (well, etc.)~~
- ~~Storage of chemicals, fertilizers, pesticides or any other substance in sufficient quantities or in a manner that has the potential to contaminate the water system.~~
- ~~For Residential Properties, the District's Cross-Connection Control Specialist may conduct an inspection of the user's property to determine if potential cross-connections have been mitigated through the use of approved measures, such as the installation of approved anti-siphon hose bibs, air gaps on swimming pool fill lines, anti-siphon backflow preventers on irrigation systems, etc.~~

8.20.010.04.1 General Provisions

1. Unprotected cross-connections with the public water supply are prohibited.

2. Whenever backflow protection has been found necessary, the District will require the water user to install an approved backflow prevention assembly by and at his or her expense for continued services or before a new service will be granted.

3. Wherever backflow protection has been found necessary on a water supply line entering a water user's premises, then any and all water supply lines from the District's' mains entering such premises, buildings, or structures shall be protected by an approved backflow prevention assembly. The type of assembly to be installed will be in accordance with the requirements of this chapter.

4. The Cross-Connection Control Specialist shall give notice in writing to all District customers who are required to install an approved backflow

prevention device at each potable water service connection. Within the time prescribed by the General Manager or designate, which shall not be less than sixty (60) days, the customer shall install such approved device(s) at the customer's own expense; and failure or refusal or inability on the part of the customer to install said device(s) shall immediately constitute grounds for discontinuing water service to the metered water service connections until the required device(s) have been properly installed.

5. The District shall maintain records of all approved backflow devices installed in the water system. The District shall also keep records regarding the certification of all devices. Testing of backflow devices shall be done at least annually or more often as the District deems necessary, depending on the degree of hazard. It is the District's primary responsibility to ensure that all testing and record keeping conforms to State Health regulations relating to cross connections.

8.20.010.04.2 Where Protection is Required

1. Each service connection from the District's water system for supplying water to premises having an auxiliary water supply shall be protected against backflow of water from the premises into the public water system.

2. Each service connection from the District's water system for supplying water to any premises on which any substance is handled in such fashion as to allow its entry into the water system shall be protected against backflow of the water from the premises into the public system. This shall include the handling of process waters and waters originating from the District water system which have been subjected to deterioration in sanitary quality.

3. Backflow prevention assemblies shall be installed on the service connection to any premises having (a) internal cross-connection that cannot be permanently corrected and controlled to the satisfaction of the state or local health department and the District, or (b) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it

impractical or impossible to ascertain whether or not cross-connections exist.

8.20.010.04.3 Type of Protection Required

1. The type of protection that shall be provided to prevent backflow into the approved water supply shall be commensurate with the degree of hazard that exists on the consumer's premises. The type of protective assembly that may be required (listing in an increasing level of protection) includes: Reduced Pressure Principal Backflow Prevention Assembly (RP), and an air-gap separation (AG). The water user may choose a higher level of protection than required by the District. The minimum types of backflow protection required to protect the approved water supply, at the user's water connection to premises with varying degrees of hazard are given in Table 1 below. Situations which are not covered in Table 1 shall be evaluated on a case-by-case basis and the appropriate backflow protection shall be determined by the District or health agency.

2. Two or more services supplying water from different street mains to the same building or premises through which an inter-street main flow may occur, shall have at least a standard check valve on each water service to be located adjacent to and on the property side of the respective meters. This check valve shall not be considered adequate if backflow protection is deemed necessary to protect the District's mains from pollution or contamination; in such cases, the installation of approved backflow assemblies at such service connection shall be required.

Table 1
Type of Backflow Protection Required

Degree of Hazard	Minimum Type of Backflow Protection
Sewage and Hazardous Substances	

1.	Premises where the public water system is used to supplement the reclaimed water supply.	AG
2.	Premises where reclaimed water is used and there is no interconnection with the potable water system. This does not include a single-family residence that has a sewage lift pump. An RP may be provided in lieu of an AG if approved by the health agency and the District.	AG
3.	Premises where hazardous substances are handled in any manner in which the substances may enter a potable water system. This does not include a single-family residence that has a sewage lift pump. An RP may be provided in lieu of an AG if approved by the health agency and the District.	AG
4.	Premises where there are irrigation systems into which fertilizers, herbicides, or pesticides, are, or can be, injected.	RP
	Auxiliary Water Supplies	
1.	Premises where there is an unapproved auxiliary water supply which is interconnected with the public water system. An RP may be provided in lieu of an AG if approved by the health agency and the District.	AG
2.	Premises where there is an unapproved auxiliary water supply and there are no interconnections with the public water system. A DC may be provided in lieu of an RP if approved by the health agency and the District.	RP
	Fire Protection Systems	
1.	Premises where the fire system is directly supplied from the public water system and there is an unapproved auxiliary water supply on or to the premises (not interconnected).	DCDA
2.	Premises where the fire system is supplied from the public water system and interconnected with an unapproved auxiliary water supply. An RP may be provided in lieu of an AG if approved by the health agency and the District.	AG
3.	Premises where the fire system is supplied from the public water system and where either elevated storage tanks or fire pumps which take suction from the private reservoirs or tanks are used.	DCDA
4.	Premises where a fire system is interconnected with more than one service connection from the District water system and no other system hazard exists.	DCDA
	Other Systems	
1.	Premises where a booster pump is required on the service connection line.	DC
2.	Premises where there is a well	RP
3.	Premises where there is intricate plumbing and piping arrangements or where entry to all portions of the premises is restricted or not easily accessible for inspection purposes, making it impossible or impossible to ascertain whether or not cross-connections exist.	RP

8.20.010.05.050 Backflow Prevention Assemblies Device - General Requirements

The District is responsible for the protection of the potable water system from potential contamination or pollution due to the backflow of contaminants or pollutants through the potable water service connections.

An approved backflow prevention device is required at all potable water service connections except for the following:

(1) Any water service connection for single or duplex Residential Properties where the connection is one inch (1") or smaller and the degree of hazard does not rise to the level requiring a backflow device as determined by the District's Cross-Connection Control Specialist.

(2) Any water service connection which is locked off, provided however, that before water service may be unlocked the customer shall comply with all of the backflow prevention provisions of this chapter.

The Cross-Connection Control Specialist shall give notice in writing to all District customers who are required to install an approved backflow prevention device at each potable water service connection. Within the time prescribed by the General Manager or designate, which shall not be less than sixty (60) days, the customer shall install such approved device(s) at the customer's own expense; and failure or refusal or inability on the part of the customer to install said device(s) shall immediately constitute grounds for discontinuing water service to the metered water service connections until the required device(s) have been properly installed.

The District shall maintain records of all approved backflow devices installed in the water system. The District shall also keep records regarding the certification of all devices. The District shall be responsible for notifying each customer/user when a device is required to be installed or tested. Testing of backflow devices shall be done at least annually or more often as the District deems necessary, depending on the degree of hazard. It is the District's primary responsibility to ensure that all testing and record keeping conforms to State Health regulations relating to cross-connections.

8.20.010.05.1 Approved Backflow Prevention Assemblies

1. Only backflow prevention assemblies approved by the California Department of Health Services shall be acceptable for installation by a water user connected to the District's potable water system.

2. The District will provide, upon request, to any affected customer a list of approved backflow prevention assemblies.

8.20.010.05.2 Backflow Prevention Assembly Installation

1. Backflow prevention assemblies shall be installed in a manner prescribed in Section 7603, Title 22 of the California Administrative Code. Location of the assemblies should be as close as

practical to the user's connection and no further than eighteen (18) inches away from the meter. The District shall have the final authority in determining the required location of a backflow prevention assembly. Approved backflow prevention assemblies shall be protected when necessary from extreme weather or site conditions that could cause physical damage to or malfunction of the backflow prevention assembly.

a. Air-Gap Separation (AG). The air-gap separation shall be located on the user's side of and as close to the service connection as is practical. All piping from the service connection to the receiving tank shall be above grade and be entirely visible. No water use shall be provided from any point between the service connection and the air-gap separation. The water inlet piping shall terminate a distance of at least two pipe diameters of the supply inlet, but in no case less than one inch above the overflow rim of the receiving tank.

b. Reduced Pressed Principal Backflow Prevention Assembly (RPA). The approved reduced pressure principal backflow prevention assembly shall be installed on the user's side of and as close to the service connection as is practical no more than eighteen (18) inches away. The assembly shall be installed so that the bottom of the relief valve is a minimum of twelve (12) inches above the grade and not more than thirty-six (36) inches above grade measured from the bottom of the assembly and with a minimum of twelve (12) inches side clearance. The assembly should be installed so that it is readily accessible for maintenance and testing.

8.20.010.05.3 Backflow Prevention Assembly Testing and Maintenance

1. Backflow prevention assemblies must be tested at least annually and immediately after installation, relocation, or repair. The District may require a more frequent testing schedule if it is deemed to be necessary. A report in a form

acceptable to the District shall be filed each time an assembly is tested, relocated, or repaired. These assemblies shall be serviced, overhauled, or replaced whenever they are found to be defective and all costs of testing, repair, and maintenance shall be borne by the water user.

2. Testing of backflow preventers is required annually for all connections to the water system and is mandatory. Testing is the responsibility of RMWD and the results of testing shall be reported to the Cross-Connection Control Specialist on the required forms at the completion of the testing. Testing of brand-new backflow devices can be completed by a certified tester. Testing must be done by a person or persons certified in accordance with state standards and the tester's credentials must be approved by the RMWD. Any backflow preventer that fails the testing shall be repaired or replaced and retested at the owner's expense. If it is replaced the type, make, model and location of the backflow preventer will be reported to RMWD Cross-Connection Control Specialist All results of testing will be reported to RMWD and remain on file for no less than 10 years.

3. RMWD is not responsible for replacing gaskets, seats, seal diaphragms, backflow devices, ball valves or test cocks. The customer is responsible for all maintenance of the backflow device to include replacement of device.

8.20.010.0660 Requests for New Services~~Appeal Procedure~~

8.20.010.06.1 Water System Survey

1. The Cross-Connection Control Specialist shall review all requests for new services to determine if backflow protection is needed. Plans and specifications must be submitted to the Cross-Connection Control Specialist upon request for review of possible cross-connection hazards as a condition of service for new service connections. If it is determined that a backflow prevention assembly is necessary to protect the public water system, the required assembly must be installed before service will be granted.

2. The District may require an on-premises inspection to evaluate cross-connection hazards. The District will schedule transmit a

written notice requesting an inspection appointment to each affected water user. Any customer who cannot or will not allow an on-premises inspection of their piping system shall be required to install the backflow prevention assembly the District considers necessary.

3. The District may require a reinspection for cross-connection hazards of any premises to which it serves water. The District will transmit a written notice requesting an inspection appointment to each affected water user. Any customer who cannot or will not allow an on-premises inspection of their piping system shall be required to install the backflow prevention assembly the District considers necessary.

8.20.010.06.2 Customer Notification — Assembly Installation

1. The District will notify the water user of the survey findings, listing corrective action to be taken if required. A period of sixty (30) days will be given to complete all corrective action required including installation of backflow prevention assemblies.

2. A second notice will be sent to each water user which does not take the required corrective action prescribed in the first notice within the sixty (30) day period allowed. The second notice will give the water user a two-week period to take the required corrective action. If no action is taken within the two-week period, the District may terminate water service to the affected water user until the required corrective actions are taken.

8.20.010.06.3 Backflow Prevention Assembly Removal

1. Approval must be obtained from the District before a backflow prevention assembly is removed, relocated, or replaced.

   a. **Removal:** The use of an assembly may be discontinued and the assembly removed from service upon presentation of sufficient evidence to the District to verify that a hazard no longer exists or is not likely to be created in the future. Approved backflow prevention assemblies shall not be bypassed, made inoperative or removed without specific

written authorization by the Water Utilities Director or his or her representative.

b. **Relocation:** An assembly may be relocated following confirmation by the District that the relocation will continue to provide the required protection and satisfy installation requirements. A retest will be required following the relocation of the assembly.

c. **Repair:** An assembly may be removed for repair, provided the water use is either discontinued until repair is completed and the assembly is returned to service, or the service connection is equipped with other backflow protection approved by the District. A retest will be required following the repair of the assembly.

d. **Replacement:** An assembly may be removed and replaced provided the water use is discontinued until the replacement assembly is installed. All replacement assemblies must be approved by the District and must be commensurate with the degree of hazard involved.

~~Any customer wishing to appeal a determination of the requirement for installation of a backflow prevention device may do so, in writing, within forty-five (45) days of the date of the first written notification. There will be an Appeal Hearing scheduled for the customer or customer representative to present their arguments against complying with either the directives or the schedule given in the notification. The Appeal Hearing Panel consists of the General Manager and any other staff deemed appropriate by the General Manager. The purpose of the hearing is to confirm, modify or deny the findings of the Cross-Connection Control Specialist. The decision of the Appeal Hearing Panel is final.~~

8.20.010.07~~0~~ Water Service Termination~~Protection Required Before System Connection~~

8.20.010.07.1 General

When the District encounters water uses that represent a clear and immediate hazard to the potable water supply that cannot be immediately abated, the District shall institute the procedure for discontinuing the District water service.

8.20.010.07.2 Basis for Termination

Condition or water uses that create a basis for water service termination shall include, but are not limited to the following items:

1. Refusal to install a required backflow prevention assembly.

2. Refusal to test a backflow prevention assembly.

3. Refusal to repair a faulty backflow prevention assembly.

4. Refusal to replace a faulty backflow prevention assembly.

5. Direct or indirect connection between the District water system and a sewer line.

6. Unprotected direct or indirect connection between the District water system and an auxiliary water system.

7. A situation which presents an immediate health hazard to the District water system.

8.20.010.07.3 Water Service Termination Procedures

1. For conditions B1, B2 or B3, the District will terminate service to a customer's premises after two written notices have been sent specifying the corrective action needed and the time period in which it must be done. If no action is taken within the allowed time period water service may be terminated.

2. For conditions B4, B5, B6 of B7, the District will take the following steps:

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

   b. Terminate water supply and lock service valve. The water service will remain inactive until correction of violations has been approved by the District.

~~No potable water service connection to any premises shall be placed in service by the District unless the District system is protected as required by this chapter. Service of water to any premises shall be immediately discontinued by the District if a backflow prevention device required by state laws and regulation and by this chapter is not installed, tested and maintained, or if it is found that a backflow prevention device has been removed, by-passed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.~~

8.20.010.08080 Backflow Prevention Assembly FeesDevice Installation, Replacement, Relocation, and Repair

1. **Installation:** All backflow prevention devices shall be installed directly behind and as close to the meter as practical but no more than eight (8) feet away, per Rainbow Standards Drawing Number W-1. The device is to be installed before any branches, trees, valves and strainers in the water line. Two or more backflow prevention devices of the same type may be installed in parallel when approved by the District. All single device installations shall be the size of the meter or greater. Devices must be installed to the District's specifications. When the street pressure exceeds the maximum working pressure of the backflow device (150 PSI), a pressure regulator can be installed on the upstream leg of the backflow assembly. Pressure regulators can be installed on the downstream leg of the backflow assembly. The District will be the final authority in determining the required location of a backflow prevention device.
   Backflow prevention devices shall be tested by a certified tester immediately after they are installed and not placed into service unless they are functioning as required.

2. **Replacement:** A device may be removed and replaced provided the water use is discontinued until the replacement device is installed and tested. All Replacement devices must be approved by the District.

3. **Relocation:** A device may be relocated following confirmation by the District that the relocation will continue to provide the required protection and satisfy installation requirements. A retest will be required following the relocation of the device;

4. **Repair:** A device may be removed for repair; provided the water use is either discontinued until repair is completed and the device is returned to service, or the service connection is equipped with other backflow protection approved by the District. A retest will be required following the repair of the device.

   A. A testing fee will be charged to any/all water users having an approved testable backflow prevention assembly of which the District conducts the test. This money is to be deposited into the Cross-Connection Fund. The amount of this fee will be set by a resolution.

   B. Upon noncompliance by a user following a first notice (after the time period in which the test must be done) regarding the periodic testing of the backflow prevention assembly, the District's representative shall have the option of either hiring a certified backflow assembly tester to test such assembly with all expenses; including an administrative fee, will be charged to the customer. This noncompliance can result in terminating water service or having the District test it. Nonpayment of the charge amount will result in termination of water service.

8.20.010.09090 User SupervisorSystems to be Open for Inspection, Installation and Testing

All customer/user systems shall be available for inspection, installation and testing at all reasonable times to authorized representatives of the District to determine whether cross-

~~connections or other structural or sanitary hazards exist, including violations of this chapter. Refusal of an inspection will result in a mandatory requirement that the water service be locked off until a backflow device is installed, or an inspection reveals that no hazard exist. When such a condition becomes known, the District shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the customer has corrected the condition(s) in conformance with state laws and District ordinances relating to plumbing and water supplies and with regulations adopted pursuant thereto.~~

At each premise, a "User Supervisor" shall be designated by and at the expense of the water user. This user supervisor shall be responsible for the monitoring of the backflow prevention assemblies and for the avoidance of cross-connections. In the event of contamination or pollution of the drinking water system due to a cross-connection on the premises, the District shall be promptly notified by the user supervisor so that appropriate measures may be taken to overcome the contamination. The water user shall inform the District of the user supervisors identify on, as a minimum, an annual basis and whenever a change occurs.

~~8.20.100~~
~~Backflow Prevention Device Required~~

~~The District will determine which one of the following backflow prevention devices is required: Reduced Pressure Principle Backflow Prevention Device (RP) or Reduced Pressure Principle Detector Backflow Assembly (RPDA). Existing nonconforming devices may remain until they need replacement. If a hazard exist an approved device will be required. The District will be the final authority in determining what type of backflow prevention is required.~~

~~When required, a reduced pressure backflow preventer shall be installed immediately after the meter at each and every potable water service connection within the District as required by this chapter.~~

~~When required, Reduced Pressure Principle Backflow Prevention Device (RP) will be installed as close to the water service connection as possible. Such backflow protection will be required for but not limited to the following conditions:~~

- ~~Sewage treatment plants;~~
- ~~Manufacturing, processing or fabricating plants where toxic materials or water are pumped, processed or treated;~~
- ~~Any location where the District deems the installation of a Reduced Pressure Principle Backflow Prevention Device (RP) is necessary.~~

~~8.20.110~~
~~Certification of Backflow Prevention Devices~~

~~Any backflow prevention device required by this chapter shall be of a model and size approved by the District. The term "approved backflow prevention device" means a device that has been established by the American Water Works Association, as set forth in its publication entitled, AWWA C511-89 Standards for Reduce Pressure Principle Backflow Prevention Devices, and meets the most current edition of the Manual of Cross-Connection Control of the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California.~~

~~Final approval shall be evidenced by a certificate of approval issued by an approved testing laboratory, certifying full compliance with said AWWA Standards and FCC&HR Specifications.~~

~~The following testing laboratory is approved by the board to test and certify backflow preventers: Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, KAP-200 University Park MC-2531, Los Angeles, California 90089-2531.~~

~~Backflow preventers which may be subjected to back pressure or backsiphonage that have been fully tested and have been granted a certificate of approval by said approved laboratory and are listed on the laboratory's current list of approved devices may be used.~~

~~8.20.120~~
~~Existing Devices~~

~~All presently installed backflow prevention devices previously approved by the District shall be deemed to comply with the requirements of this chapter provided such devices meet current performance and testing requirements. Existing devices which do not meet current performance or testing requirements shall be repaired or replaced by a backflow prevention device meeting the requirements of this chapter. Any such replacement cost will be borne by the customer/user.~~

~~Existing nonconforming devices may remain until they need replacement. If a hazard exists an approved device will be required. The District will be the final authority in determining what type of backflow prevention is required.~~

~~Any existing Double Check Detector Backflow Prevention Assembly (DCDA) devices needing to be replaced shall be replaced with a Reduced Pressure Principal Detector Backflow Prevention Assembly. Any existing Double Check Valve Backflow Prevention Assembly needing to be replaced shall be replaced with a Reduced Pressure Principal Device (RP) if a hazard exists.~~

~~Existing devices not required by this ordinance may be:~~

- ~~Maintained and tested at owner's expense~~
- ~~Removed at owner's expense if District determines no hazard exist~~

~~It is the customer's responsibility to notify the District if they wish to withdraw from the testing program under this provision. An inspection would be required before withdrawing or removing from the program.~~

~~8.20.130~~
~~Inspections and Testing Responsibility~~

~~The customer/user is responsible for ensuring the annual testing and making any necessary repairs to pass the test. The District will maintain a record of testing performed and a calendar indicating when the next test is required. The District has retained the services of a licensed contractor to administer the testing and monitoring program. Customers may elect to be included in this monitoring group and their devices will be tested annually by the contractor. The District shall pass its actual cost for the testing on to the customer in a monthly cross-connection control fee.~~

~~All other expenses where backflow prevention devices are installed, replaced, relocated, repaired or overhauled are the responsibility of the customer. All inspections and operational tests will be made by a certified tester. In those instances where the District deems the hazard to be great enough, it may require certified inspections at more frequent intervals. These inspections and tests shall be at the expense of the customer/user and shall be performed by a District-approved certified tester. It shall be the duty of the District to see that these timely tests are to be undertaken~~

so that District personnel may witness the tests if it is so desired. These devices shall be repaired, overhauled or replaced at the expense of the customer/user whenever said devices are found to be defective. Records of such tests, repairs and overhaul shall be kept on file with the District.

8.20.140
Noncompliance, Penalties

In the event a customer is notified that a backflow device shall be installed or tested on the customer's service connection and a reasonable compliance time has been allowed by the District in which the customer has not complied with the District's request, then the customer's water service shall be locked off. The customer's water service shall remain locked until an approved backflow device is installed and/or tested by a certified backflow tester; and all unlock fees are paid.

If a device is found to be tampered with or any deliberate action to impede the function of the backflow device, the service will be locked immediately, and the customer will be responsible for paying all costs and fines associated with the violation.

8.20.150
Monthly Charges

Monthly charges will be established by the District as necessary. The purpose of such charges will be to cover the cost incurred by the District for regulation and enforcement of the cross-connection control regulations and annual testing of customer backflow devices and the repair, if necessary, to pass test.

8.20.160
Interpretation of Provisions

This chapter and Title 17 of the California Code of Regulations shall guide the District in the implementing and functioning of its backflow prevention program. In instances where this chapter does not define the application of the backflow prevention program the District shall reply on Title 17 of the California Code of Regulations for definition. In instances where this chapter or said Title 17 does not give definition then the District shall rely on the State Water Resources Control Board.

Section 8.20.010
Cross-Connection Control Policy

8.20.010.01 Purpose

The purpose of this policy is to:

A. Protect the District system from the possibility of contamination or pollution, by isolating within customer systems such contaminants or pollutants that have the potential to backflow into the District's potable water system; and

B. Provide for an ongoing program of cross-connection control which will systematically and effectively prevent the contamination or pollution of the District's potable water system; and

C. Meet or exceed Federal and State regulations pertaining to cross-connection control issues.

8.20.010.02 Legal Basis and Authority for Program

8.20.010.02.1 Legal Basis

All legal authorities and references shall be current versions and revisions.

1. The purpose of this ordinance is to protect the public water supply against actual potential cross-connection by isolating within the premise contamination that may occur because of some undiscovered or unauthorized cross-connection on the premises.

2. To eliminate existing connections between drinking water systems and other sources of water that are not approved as safe and potable for human consumption.

3. To eliminate cross-connections between drinking water systems and sources of contamination.

4. To prevent the making of cross-connections in the future.

5. To maintain the backflow prevention program by administering an inspection and testing program of backflow prevention assemblies installed at the meter.

These regulations are adopted pursuant to the state of California Code of Regulations, Title 17, Public Health entitled "Regulations Relating to Cross-Connections." It is unlawful for any person, firm, or corporation at any time to make or maintain or cause to be made or maintained, temporarily or

permanently, for any period of time whatsoever, any cross-connection between plumbing pipes or water fixtures being served with water by the District water department and any other source of water supply to maintain any sanitary fixture or other source of water supply or to maintain any sanitary fixture or other appurtenances or fixtures which by reason of their construction may cause or allow backflow of water or other substances into the water supply system of the District and/or the service of water pipes or fixtures of any consumer of the District.

8.20.010.02.2 Authority

1. Code of Federal Regulations, Safe drinking Water Act - most current

2. Code of California Regulations, Titles 17 and 22

3. State of California Water Code, Chapter 1, Section 110. Chapter 8, Section 500 and Chapter 723, Sections 13553, 13554.2, and 13554.3

4. American Water Works Association Manual of Water Supply Practices M14

5. University of Southern California (USC Manual) – latest or current edition

6. California Plumbing Code (CPC)

7. Rainbow Municipal Water District Administrative Code

8.20.010.03 Definitions

For the purposes of this policy, the following words and phrases have the following meanings:

"ABPA": American Backflow Prevention Association.

"ASSE": American Society of Sanitary Engineers.

"AWWA": American Water Works Association.

"Air-Gap Separation": A physical break between a supply pipe and a receiving vessel. The airgap shall be at least double the diameter of the supply pipe measured vertically above the top rim of vessel, no less than one inch.

"Approved Backflow Prevention Assembly": An assembly or physical separation that has been designed specifically for preventing the backflow of water/liquid, gas from entering the system, which has passed laboratory and field evaluation tests performed by a recognized testing organization

which has demonstrated their competency to the California Department of Health Services.

"Approved Water Supply": Any water supply whose potability is regulated by a state or local health agency.

"Auxiliary Supply": Any water supply on or available to the premises other than the District water supply.

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

"Backflow": A flow condition, caused by a differential in pressure, that causes the flow of water or other liquids, gases, mixtures, or substances into the distributing pipes of a potable supply of water from any source other than an approved water supply. Back siphonage or back pressure are causes of backflow.

"Consumer's Water System": Is defined as and includes all facilities beyond the service meter. The system or systems may include both potable and non-potable water systems.

"Contamination": A degradation of the quality of the potable water by any foreign substance which creates a hazard to the public health, or which may impair the usefulness or quality of the water.

"Cross-Connection": As used in this chapter, is any unprotected actual or potential connection between a potable water system used to supply water for drinking purposes and any source or system containing unapproved as safe, wholesome, and potable. Bypass arrangements, jumper connections, removable sections, swivel or changeover assemblies, or other assemblies through which backflow could occur, shall be considered to be cross-connections.

“Cross-Connection Specialist”: A person by title or designated by the General Manger who ensures all service connections are protected by approved backflow devices or by abating and eliminating cross connections.

“District”: Rainbow Municipal Water District.

"District Water System": The source facilities and distribution system under the control of the District of Oceanside Water Utilities Department up to and including the meter.

"Double Check Detector Check Assembly (DCDA)”: A backflow prevention assembly consisting of a line size double check valve assembly in parallel with a detector meter and water size double check valve assembly. Each double check valve assembly is to be equipped with property located test cocks and a tightly closing shut-off valve at the end of the assembly.

"Double Check Valve Assembly (DCA)": An assembly of at least two independently acting check valves including tightly closing shut-off valves on each side of the check valve assembly and test cocks available for testing the water tightness of each check valve.

"Dual Check Valve Device (DC)": A line dual check valve that is installed immediately after the water meter on residential services. This device is non testable.

"Degree of Hazard": Is derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

1. **"Health Hazard"** is any condition, assembly, or practice in the water supply system and its operation which could create, or in the judgment of the division, county, or state health official, may create a danger to the health and well-being of the water consumer.

2. **"Plumbing Hazard"** is a type of plumbing cross-connection in a consumer's potable water system that has not been properly protected by an approved airgap or approved backflow prevention assembly.

3. **"Pollution Hazard"** is an actual or potential threat to the physical properties of the water system or to the potability of the public or the consumer's potable water system, but which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances but would not be dangerous to health.

4. **"System Hazard"** is an actual or potential threat of severe damage to the physical properties of the public potable water system of 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.

"Health Agency": Refers to the California Department of Health Services.

"Local Health Agency": Refers to the County of San Diego Department of Environmental Health.

"Passive Purge": Refers to a type of fire sprinkler system that serves all toilets in addition to fire sprinklers, allowing water to circulate throughout the entire system on a regular basis and, therefore, avoiding stagnation.

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

"Pollution": The presence of any foreign substance (organic, inorganic, or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which

does not create an actual hazard to the public health, but which does adversely and unreasonably affect such waters for domestic use.

"Premises": Any and all areas on a customer's property which are served or have the potential to be served by the public water system.

“Pressure Vacuum Breaker (PVB) Assembly”: Refers to a backflow prevention assembly containing a spring loaded check valve and a spring loaded air-inlet valve which opens when the pressure approaches atmospheric. The unit shall include two tightly closing shut-off valves located at each end of the assembly and two test cocks properly located for testing the device. Can be used for internal protection but NOT meter protection.

"Public Water System": A system for the provision of piped water to the public for human consumption which has five or more service connections or regularly serves an average of twenty-five (25) individuals daily at least sixty (60) days out of the year.

“Rainbow Municipal Water District”: RMWD.

"Reclaimed Water": A wastewater which as a result of treatment is suitable for uses other than potable use.

“Recycled Water”: See Reclaimed Water.

"Reduced Pressure - Detector Check Assembly (RPDCA)”: A backflow prevention assembly consisting of a line-size reduced pressure principal assembly in parallel with a detector meter and meter-size reduced pressure principal assembly. Each reduced pressure principal assembly is to be equipped with properly located test cocks and a tightly closing shut-off valve at each end of the assembly.

"Reduced Pressure Principal Backflow Prevention Assembly (RPA)”: An assembly incorporating two or more check valves and an automatically operating differential relief valve located between the two checks, a tightly closing shut-off valve on each side of the check valve assembly and equipped with necessary test cocks for testing.

"Service Connection": Refers to the point of connection of a user's piping to the District's facilities.

“User Supervisor”: Refers to the person on site and who is responsible for the monitoring of the backflow prevention devices and for the avoidance of cross-connections

"Water User": Any person obtaining water from an approved water supply system.

8.20.010.04 Cross-Connection Protection Requirements

8.20.010.04.1 General Provisions

1. Unprotected cross-connections with the public water supply are prohibited.

2. Whenever backflow protection has been found necessary, the District will require the water user to install an approved backflow prevention assembly by and at his or her expense for continued services or before a new service will be granted.

3. Wherever backflow protection has been found necessary on a water supply line entering a water user's premises, then any and all water supply lines from the District's' mains entering such premises, buildings, or structures shall be protected by an approved backflow prevention assembly. The type of assembly to be installed will be in accordance with the requirements of this chapter.

4. The Cross-Connection Control Specialist shall give notice in writing to all District customers who are required to install an approved backflow prevention device at each potable water service connection. Within the time prescribed by the General Manager or designate, which shall not be less than sixty (60) days, the customer shall install such approved device(s) at the customer's own expense; and failure or refusal or inability on the part of the customer to install said device(s) shall immediately constitute grounds for discontinuing water service to the metered water service connections until the required device(s) have been properly installed.

5. The District shall maintain records of all approved backflow devices installed in the water system. The District shall also keep records regarding the certification of all devices. Testing of backflow devices shall be done at least annually or more often as the District deems necessary, depending on the degree of hazard. It is the District's primary responsibility to ensure that all testing and record keeping conforms to State Health regulations relating to cross connections.

8.20.010.04.2 <u>Where Protection is Required</u>

1. Each service connection from the District's water system for supplying water to premises having an auxiliary water supply shall be protected

against backflow of water from the premises into the public water system.

2. Each service connection from the District's water system for supplying water to any premises on which any substance is handled in such fashion as to allow its entry into the water system shall be protected against backflow of the water from the premises into the public system. This shall include the handling of process waters and waters originating from the District water system which have been subjected to deterioration in sanitary quality.

3. Backflow prevention assemblies shall be installed on the service connection to any premises having (a) internal cross-connection that cannot be permanently corrected and controlled to the satisfaction of the state or local health department and the District, or (b) intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impractical or impossible to ascertain whether or not cross-connections exist.

8.20.010.04.3 <u>Type of Protection Required</u>

1. The type of protection that shall be provided to prevent backflow into the approved water supply shall be commensurate with the degree of hazard that exists on the consumer's premises. The type of protective assembly that may be required (listing in an increasing level of protection) includes: Reduced Pressure Principal Backflow Prevention Assembly (RP), and an air-gap separation (AG). The water user may choose a higher level of protection than required by the District. The minimum types of backflow protection required to protect the approved water supply, at the user's water connection to premises with varying degrees of hazard are given in Table 1 below. Situations which are not covered in Table 1 shall be evaluated on a case-by-case basis and the appropriate backflow protection shall be determined by the District or health agency.

2. Two or more services supplying water from different street mains to the same building or premises through which an inter-street main flow may occur, shall have at least a standard check valve on each water service to be located

adjacent to and on the property side of the respective meters. This check valve shall not be considered adequate if backflow protection is deemed necessary to protect the District's mains from pollution or contamination; in such cases, the installation of approved backflow assemblies at such service connection shall be required.

Table 1
Type of Backflow Protection Required

	Degree of Hazard	Minimum Type of Backflow Protection
	Sewage and Hazardous Substances	
1.	Premises where the public water system is used to supplement the reclaimed water supply.	AG
2.	Premises where reclaimed water is used and there is no interconnection with the potable water system. This does not include a single-family residence that has a sewage lift pump. An RP may be provided in lieu of an AG if approved by the health agency and the District.	AG
3.	Premises where hazardous substances are handled in any manner in which the substances may enter a potable water system. This does not include a single-family residence that has a sewage lift pump. An RP may be provided in lieu of an AG if approved by the health agency and the District.	AG
4.	Premises where there are irrigation systems into which fertilizers, herbicides, or pesticides, are, or can be, injected.	RP
	Auxiliary Water Supplies	
1.	Premises where there is an unapproved auxiliary water supply which is interconnected with the public water system. An RP may be provided in lieu of an AG if approved by the health agency and the District.	AG
2.	Premises where there is an unapproved auxiliary water supply and there are no interconnections with the public water system. A DC may be provided in lieu of an RP if approved by the health agency and the District.	RP
	Fire Protection Systems	
1.	Premises where the fire system is directly supplied from the public water system and there is an unapproved auxiliary water supply on or to the premises (not interconnected).	DCDA
2.	Premises where the fire system is supplied from the public water system and interconnected with an unapproved auxiliary water supply. An RP may be provided in lieu of an AG if approved by the health agency and the District.	AG

3.	Premises where the fire system is supplied from the public water system and where either elevated storage tanks or fire pumps which take suction from the private reservoirs or tanks are used.	DCDA
4.	Premises where a fire system is interconnected with more than one service connection from the District water system and no other system hazard exists.	DCDA
	Other Systems	
1.	Premises where a booster pump is required on the service connection line.	DC
2.	Premises where there is a well	RP
3.	Premises where there is intricate plumbing and piping arrangements or where entry to all portions of the premises is restricted or not easily accessible for inspection purposes, making it impossible or impossible to ascertain whether or not cross-connections exist.	RP

8.20.010.05 Backflow Prevention Assemblies

8.20.010.05.1 Approved Backflow Prevention Assemblies

1. Only backflow prevention assemblies approved by the California Department of Health Services shall be acceptable for installation by a water user connected to the District's potable water system.

2. The District will provide, upon request, to any affected customer a list of approved backflow prevention assemblies.

8.20.010.05.2 Backflow Prevention Assembly Installation

1. Backflow prevention assemblies shall be installed in a manner prescribed in Section 7603, Title 22 of the California Administrative Code. Location of the assemblies should be as close as practical to the user's connection and no further than eighteen (18) inches away from the meter. The District shall have the final authority in determining the required location of a backflow prevention assembly. Approved backflow prevention assemblies shall be protected when necessary from extreme weather or site conditions that could cause physical damage to or malfunction of the backflow prevention assembly.

   a. Air-Gap Separation (AG). The air-gap separation shall be located on the user's side of and as close to the service connection as is practical. All piping from the service connection to the receiving tank shall be above grade and be entirely

visible. No water use shall be provided from any point between the service connection and the air-gap separation. The water inlet piping shall terminate a distance of at least two pipe diameters of the supply inlet, but in no case less than one inch above the overflow rim of the receiving tank.

b. Reduced Pressed Principal Backflow Prevention Assembly (RPA). The approved reduced pressure principal backflow prevention assembly shall be installed on the user's side of and as close to the service connection as is practical no more than eighteen (18) inches away. The assembly shall be installed so that the bottom of the relief valve is a minimum of twelve (12) inches above the grade and not more than thirty-six (36) inches above grade measured from the bottom of the assembly and with a minimum of twelve (12) inches side clearance. The assembly should be installed so that it is readily accessible for maintenance and testing.

8.20.010.05.3 <u>Backflow Prevention Assembly Testing and Maintenance</u>

1. Backflow prevention assemblies must be tested at least annually and immediately after installation, relocation, or repair. The District may require a more frequent testing schedule if it is deemed to be necessary. A report in a form acceptable to the District shall be filed each time an assembly is tested, relocated, or repaired. These assemblies shall be serviced, overhauled, or replaced whenever they are found to be defective and all costs of testing, repair, and maintenance shall be borne by the water user.

2. Testing of backflow preventers is required annually for all connections to the water system and is mandatory. Testing is the responsibility of RMWD and the results of testing shall be reported to the Cross-Connection Control Specialist on the required forms at the completion of the testing. Testing of brand-new backflow devices can be completed by a certified tester. Testing must be done by a person or persons certified in accordance with state standards and the tester's credentials must be

approved by the RMWD. Any backflow preventer that fails the testing shall be repaired or replaced and retested at the owner's expense. If it is replaced the type, make, model and location of the backflow preventer will be reported to RMWD Cross-Connection Control Specialist All results of testing will be reported to RMWD and remain on file for no less than 10 years.

3. RMWD is not responsible for replacing gaskets, seats, seal diaphragms, backflow devices, ball valves or test cocks. The customer is responsible for all maintenance of the backflow device to include replacement of device.

8.20.010.06 Requests for New Services

8.20.010.06.1 Water System Survey

1. The Cross-Connection Control Specialist shall review all requests for new services to determine if backflow protection is needed. Plans and specifications must be submitted to the Cross-Connection Control Specialist upon request for review of possible cross-connection hazards as a condition of service for new service connections. If it is determined that a backflow prevention assembly is necessary to protect the public water system, the required assembly must be installed before service will be granted.

2. The District may require an on-premises inspection to evaluate cross-connection hazards. The District will schedule transmit a written notice requesting an inspection appointment to each affected water user. Any customer who cannot or will not allow an on-premises inspection of their piping system shall be required to install the backflow prevention assembly the District considers necessary.

3. The District may require a reinspection for cross-connection hazards of any premises to which it serves water. The District will transmit a written notice requesting an inspection appointment to each affected water user. Any customer who cannot or will not allow an on-premises inspection of their piping system shall be required to install the backflow prevention assembly the District considers necessary.

8.20.010.06.2 Customer Notification — Assembly Installation

1. The District will notify the water user of the survey findings, listing corrective action to be taken if required. A period of sixty (30) days will be given to complete all corrective action required including installation of backflow prevention assemblies.

2. A second notice will be sent to each water user which does not take the required corrective action prescribed in the first notice within the sixty (30) day period allowed. The second notice will give the water user a two-week period to take the required corrective action. If no action is taken within the two-week period, the District may terminate water service to the affected water user until the required corrective actions are taken.

8.20.010.06.3 <u>Backflow Prevention Assembly Removal</u>

1. Approval must be obtained from the District before a backflow prevention assembly is removed, relocated, or replaced.

   a. **Removal:** The use of an assembly may be discontinued and the assembly removed from service upon presentation of sufficient evidence to the District to verify that a hazard no longer exists or is not likely to be created in the future. Approved backflow prevention assemblies shall not be bypassed, made inoperative or removed without specific written authorization by the Water Utilities Director or his or her representative.

   b. **Relocation:** An assembly may be relocated following confirmation by the District that the relocation will continue to provide the required protection and satisfy installation requirements. A retest will be required following the relocation of the assembly.

   c. **Repair:** An assembly may be removed for repair, provided the water use is either discontinued until repair is completed and the assembly is returned to service, or the service connection is equipped with other backflow protection approved by the District. A retest will be required following the repair of the assembly.

d. **Replacement:** An assembly may be removed and replaced provided the water use is discontinued until the replacement assembly is installed. All replacement assemblies must be approved by the District and must be commensurate with the degree of hazard involved.

8.20.010.07 Water Service Termination

8.20.010.07.1 General

When the District encounters water uses that represent a clear and immediate hazard to the potable water supply that cannot be immediately abated, the District shall institute the procedure for discontinuing the District water service.

8.20.010.07.2 Basis for Termination

Condition or water uses that create a basis for water service termination shall include, but are not limited to the following items:

1. Refusal to install a required backflow prevention assembly.
2. Refusal to test a backflow prevention assembly.
3. Refusal to repair a faulty backflow prevention assembly.
4. Refusal to replace a faulty backflow prevention assembly.
5. Direct or indirect connection between the District water system and a sewer line.
6. Unprotected direct or indirect connection between the District water system and an auxiliary water system.
7. A situation which presents an immediate health hazard to the District water system.

8.20.010.07.3 Water Service Termination Procedures

1. For conditions B1, B2 or B3, the District will terminate service to a customer's premises after two written notices have been sent specifying the corrective action needed and the time period in which it must be done. If no action is taken within

the allowed time period water service may be terminated.

2. For conditions B4, B5, B6 of B7, the District will take the following steps:

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

   b. Terminate water supply and lock service valve. The water service will remain inactive until correction of violations has been approved by the District.

8.20.010.08 Backflow Prevention Assembly Fees

A. A testing fee will be charged to any/all water users having an approved testable backflow prevention assembly of which the District conducts the test. This money is to be deposited into the Cross-Connection Fund. The amount of this fee will be set by a resolution.

B. Upon noncompliance by a user following a first notice (after the time period in which the test must be done) regarding the periodic testing of the backflow prevention assembly, the District's representative shall have the option of either hiring a certified backflow assembly tester to test such assembly with all expenses; including an administrative fee, will be charged to the customer. This noncompliance can result in terminating water service or having the District test it. Nonpayment of the charge amount will result in termination of water service.

8.20.010.09 User Supervisor

At each premise, a “User Supervisor” shall be designated by and at the expense of the water user. This user supervisor shall be responsible for the monitoring of the backflow prevention assemblies and for the avoidance of cross-connections. In the event of contamination or pollution of the drinking water system due to a cross-connection on the premises, the District shall be promptly notified by the user supervisor so that appropriate measures may be taken to overcome the contamination. The water user shall inform the District of the user supervisors identify on, as a minimum, an annual basis and whenever a change occurs.