

### Harbor View Mutual Water Company 8475 Harbor View Drive Kelseyville CA 95451 707-279-8544

## CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION POLICY AND PROCEDURES

### **PURPOSE**

As Harbor View Mutual Water Company (the Company) is responsible for protecting the safety of the drinking water from contamination as a result of cross-connection or backflow and is responsible for identifying actual and potential cross connections, the Company shall take action to protect the system from these hazards by requiring the installation of backflow prevention assemblies where hazards are identified.

### **SECTION 1.**

In adopting this policy, the Company makes the following findings:

- 1.1 The Company is responsible for maintaining water treatment, distribution and storage facilities to provide safe drinking water that meets all state and federal standards to all property owners within its service area.
- 1.2 The Environmental Protection Agency has reported the potential for backflow is significantly increased when the terrain is not flat. Within our service area, there is significant variance in height.
- 1.2.4 Some property owners have hot tubs and swimming pools, including pools that are assembled and disassembled on a seasonal basis that are filled using garden hoses. If a garden hose is left unattended and there is a system failure, the water from the hot tub or pool under certain conditions may backflow into the Company's system.

### **SECTION 2: DEFINITIONS**

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

- 2.1 "Account" refers to Company's records of ownership, customer information, billing, meter history and service supplied by the Company to any premises.
- 2.2 "Customer" means any person or entity that is connected to the Company's water system.

- 2.3 "Company" refers to the Harbor View Mutual Water Company
- 2.4 "Approved Backflow Preventer" is a backflow prevention device approved by the Foundation for Cross-connection Control and Hydraulic Research of the University of Southern California. Construction of backflow preventers pursuant to the Californian Code of Regulations, Title 17 shall be as follows:
  - 2.4.1. Air-gap Separation. An Air-gap separation (AG) shall be at least double the diameter of the supply pipe, measured vertically from the flood rim of the receiving vessel to the supply pipe; however, in no case shall this separation be less than one inch.
  - 2.4.2 Double Check Valve Assembly. A required double check valve assembly (DC) shall, as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Double Check Valve Type Backflow Preventive Devices, which is herein incorporated by reference.
  - 2.4.3 Reduced Pressure Principle Backflow Prevention Device. A required reduced pressure principle backflow prevention device (RP) shall, as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Reduced Pressure Principle Type Backflow Prevention Devices, which is herein incorporated by reference.
- 2.5 "Auxiliary Water Supply" is any water supply or access to any water supply or source other than the Company, including but not limited to private wells whether active or inactive, swimming pools, hot tubs, spas, decorative fountains, ponds, storage tanks, private reservoirs and lake water.
- 2.6 "Certified Tester" is a person holding a valid certification from the American Water Works Association, California-Nevada Section, or satisfactory completion of the course for the training and Certification of Testers for Backflow Prevention Devices offered by the Foundation for Cross-connection Control and Hydraulic Research, University of Southern California.
- 2.7 "Cross-connection" is any actual or potential connection between the Company's water supply and any Auxiliary Water Supply or any pressurized system containing a substance that is not approved as safe, wholesome, and potable.
- 2.8 "Premises" means any developed lot or parcel within the service area of the Company.
- 2.9 "Public Water Supply" is the water supply provided by Company
- 2.10 "User Connection" is the point of connection of a user's piping to the Company's water supply.
- 2.11 "Water User" is any person or entity obtaining water from the Harbor View Mutual Water Company

### SECTION 3: CROSS-CONNECTION AND BACKFLOW PREVENTION PROGRAM DIRECTOR

The Company's Head Operator is responsible for administering the Company's cross connection and backflow prevention program.

### SECTION 4: CONDITIONS REQUIRING AN APPROVED BACKFOW PREVENTER; PRIOR TO INSTALLATION OF AUXILARY WATER SOURCE

### 4.1 EVALUATION OF EXISTING CONDITIONS

The Company's Head Operator or designee shall evaluate the degree of potential health hazard to the public water supply, which may be created as a result of conditions existing on a user's premises. The Company, however, shall not be responsible for abatement of cross-connections, which may exist within a user's premises. As a minimum, the evaluation should consider: the existence of cross-connections, the nature of materials handled on the property, the probability of a backflow occurring, the degree of piping system complexity and the potential for piping system modification. Special consideration shall be given to the premises of the following types of Water Users:

- 4.1.1 Premises where substances harmful to health are handled under pressure in a manner that could permit their entry into the public water system. This includes chemical or biological process waters and water from public water supplies that have deteriorated in sanitary quality.
- 4.1.2 Premises having an auxiliary water supply, unless the auxiliary supply is accepted as an additional source by the Company's Head Operator and the water supply approved by the health agency.
- 4.1.3 Premises that have internal cross-connections that are not abated to the satisfaction of the Company or the health agency.
- 4.1.4 Premises where cross-connections are likely to occur and entry is restricted so that cross-connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist.
- 4.1.5 Premises having a repeated history of cross-connections being established or reestablished.

#### 4.2 CONDITIONS REQUIRING APPROVED BACKFLOW PREVENTER

An Approved Backflow Preventer shall be required at the user's connection point for the following types of Premises:

- 4.2.1 Premises having access to any Auxiliary Water Supply or any premises with riparian rights.
- 4.2.2 Premises where substances harmful to health are handled under pressure in a manner that could permit their entry into the public water system. This includes chemical or biological process waters, and water from Public Water Supply that may have deteriorated in sanitary quality.
- 4.2.3 Premises where there is an irrigation system which includes provisions by which fertilizers, herbicides or pesticides are, or can be, injected.
- 4.2.4 Any Premises where the fire system is supplied from the public water system and where either elevated storage tanks or pumps that have the ability to take suction from any auxiliary water source are installed.
- 4.2.5 Premises where there are marine facilities and dockside watering points.

- 4.2.6 Premises where entry is restricted so that inspections for Cross-connections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross connections do not exist.
- 4.2.7 Premises where there is a repeated history of Cross-connections being established or reestablished.
- 4.2.8 Premises where, subject to inspection and evaluation, installation of fountains, portable swimming pools, spas, etc. on premise create the potential for contamination or hazard to the water supply.

### 4.3 INSTALLATION OF APPROVED BACKFLOW PREVENTER REQUIRED PRIOR TO INSTALLATION OF AUXILARY WATER SOURCE

- 4.3.1 Any Water User that adds an Auxiliary Water Supply shall notify the Company prior to installation of that auxiliary water system.
- 4.3.1 The user shall have an Approved Backflow Preventer installed and tested by a Certified Tester and shall provide a record of installation and testing to the Company prior to installing any auxiliary water source.
- 4.3.2 The user shall request that the Certified Tester provide the Company with proof of valid tester certification.
- 4.3.3 The user shall request that the Certified Tester provide the Company with proof of current Field Test Kit calibration certification. Field Test Kits should be checked for accuracy annually and re-calibrated when inaccuracy of +0.2 psid is experienced.

### SECTION 5: INSTALLATION; INSTALLATION AND TESTING STANDARDS; TESTING; REQUIRED REPORTS; RESPONSIBILITY FOR MAINTENANCE OF BACKFLOW PREVENTERS

### 5.1 INSTALLATION NOTIFICATION

- 5.1.1 Upon determination that a backflow preventer is required at a location, the Company's Head Operator will notify each Water User of such determination and the steps that the Water User must take to comply with this ordinance.
- 5.1.2 Such notification shall be by first class mail, with proof of mailing, by delivering the information to the Water User, by posting a notice at the Premises or any combination thereof. Upon such posting, notification is considered complete.
- 5.1.3 The Water User shall have an Approved Backflow Preventer installed and tested by a Certified Tester within 90 calendar days of the date of notification.
- 5.1.4 The Customer or owner of the Premises is responsible for all costs associated with the purchase, installation and/or testing of an Approved Backflow Preventer.

### 5.2 DEGREE OF PROTECTION REQUIRED

5.2.1 The type of protection that shall be provided to prevent backflow into the public water supply shall be commensurate with the degree of hazard that exists on the consumer's premises. The type of protective device that may be required (listed in an increasing level

of protection) includes: Double Check Valve Assembly- (DC), Reduced Pressure Principle Backflow Prevention Device- (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 public water supply, at the Water User's connection to premises with various degrees of hazard are listed in 5.2.2 through 5.2.8, inclusive. The Company reserves the right to require an increased level of protection when, in the judgment of the Company, the increased level of protection serves to protect the integrity of the Company's water supply. Situations that are not covered herein shall be evaluated on a case-by-case basis and the Company's Head Operator or designee shall determine the appropriate backflow protection.

- 5.2.2 Sewage and hazardous substances: Premises where there is a wastewater pumping and/or treatment plant and there is no interconnection with the Company's system require AG protection. Premises where there irrigation systems into which fertilizers, herbicides, or pesticides are, or can be, injected require RP protection.
- 5.2.3 Auxiliary Water Supplies as defined in Section 2.5, above, require installation of an approved DC device.
- 5.2.4 Recycled Water: Residences using recycled water for any purpose require installation of an approved DC device. Any residence or property storing recycled water for any purpose requires AG protection.
- 5.2.5 Fire Protection Systems that are supplied directly by the Company's water system and where either elevated storage tanks or pumps that have the ability to take suction from any auxiliary water source, require installation of an approved DC device. In the case where the fire protection system is supplied directly by the Company and connected to an auxiliary water storage system shall have AG separation and an approved DC device installed.
- 5.2.6 Dockside marina or pier-side hydrants, hose bibs or any other connection used to supply water to boats or for other use require installation of approved RP devices.
- 5.2.7 Premises where entry is restricted so that inspections for cross-connections cannot be made with sufficient frequency or at sufficiently short notice to assure that they do not exist require installation of approved RP devices.
- 5.2.8 Premises where there is a repeated history of Cross- connections being established or reestablished require installation of an approved DC or RP device.

### 5.3 INSTALLATION AND TESTING STANDARDS

- 5.3.1 Every backflow preventer must be installed in accordance with the "Manual of Cross-connection Control Procedures and Practices" prepared by the California State Department of Health Services. Sanitary Engineering Section.
- 5.3.2 Backflow preventers shall be tested after they are installed, relocated, or repaired and shall not be put in service unless they are functioning as required.
- 5.3.3 When a backflow preventer is found to be defective, it shall be immediately repaired or replaced in accordance to the provisions of this ordinance.

### 5.4 TESTING

- 5.4.1 Each backflow preventer shall be tested during a six-month period between January 1<sup>st</sup> and June 30<sup>th</sup> of each calendar year or as specified by the Company or more frequently if determined necessary by the Company or by a health agency. A backflow preventer that is defective must be immediately repaired or replaced in accordance with the provisions of this ordinance. A backflow preventor that is not placed in service shall be tested immediately after they are installed, relocated or repaired.
- 5.4.2 This specified annual test period shall apply regardless of the date within the prior year in which the backflow preventer was tested.
- 5.4.3 The Company shall include a reminder of such testing in the water bills mailed between December and June of each year.
- 5.4.4 All testing of backflow preventers shall be conducted by a Certified Tester.

#### 5.5 REQUIRED REPORTS AND RECORDS

- 5.5.1 The Water User shall file a written report of each test, signed by the Certified Tester, with the District within ten calendar days after each test.
- 5.5.2 Reports of the testing and maintenance of backflow preventers shall be maintained by the Company for a minimum of three years.

### 5.6 RESPONSIBILITY FOR INSTALLATION, MAINTENANCE AND TESTING OF BACKFLOW PREVENTERS

The Company shall not be liable for any costs for the installation, testing, repair, or maintenance of any backflow preventer installed pursuant to this ordinance. All such costs are the sole responsibility of and shall be borne by the Water User.

# SECTION 6: IDENTIFICATION OF POTENTIAL HAZARDS TO PUBLIC WATER SUPPLY; COMPLETION OF SURVEY REQUIRED; FALSE INFORMATION PROHIBITTED; EVALUATION REQUIRED; USER REQUIRED TO NOTIFY DISTRICT PRIOR TO INSTALLATION OF AUXILLARY WATER SYSTEM

### 6.1 PERIODIC SURVEY TO IDENTIFY POTENTIAL HAZARDS

- 6.1.1 The Company shall conduct a periodic survey to identify any premises where conditions may create a hazard to the Public Water Supply.
- 6.1.2 The survey shall be mailed to every premises that has not had an Approved Backflow Preventer installed.

### 6.2 COMPLETION OF SURVEY REQUIRED

- 6.2.1 The Water User shall complete and return the survey within 30 days.
- 6.2.2 If, after 30 days, the survey has not been received, it shall be presumed that the Premises require installation of an Approved Backflow Preventer.
- 6.2.3 The Customer shall be notified on the requirements to install an approved backflow prevention device in accordance with the provisions of this ordinance.

### 6.3 FALSE INFORMATION PROHIBITTED

- 6.3.1 A Customer shall not provide any false or misleading information when completing the survey referenced in 6.2, above.
- 6.3.2 In the event a Customer supplies any false or misleading information, the Company shall immediately follow the provisions of Section 7.1 and other applicable provisions of this Policy.

### 6.4 EVALUATION REQUIRED USER REQUIRED TO NOTIFY DISTRICT

- 6.4.1 Based on the responses to the above-described survey, and any other information that the Company may have, the Company's Head Operator or designee shall evaluate whether a potential health hazard to the Public Water Supply is created as a result of the conditions existing on a user's Premises.
- 6.4.2 Such evaluation may include inspection of the Premises by the Head Operator or designee during business hours.
- 6.4.3 Denial of access to the Premises shall result in the Premises being classified as requiring the installation of an Approved Backflow Preventer and the appropriate sections of this ordinance shall apply.

### SECTION 7: IMMEDIATE DISCONTINUANCE OF SERVICE REQURIED; DISCONTINUANCE OF SERVICE REQUIRED; PENALTIES AND FEES

#### 7.1 IMMEDIATE DISCONTINUANCE OF SERVICE REQUIRED

- 7.1.1 Notwithstanding any other ordinance or provision of law when the Company believes that there is a potential for an immediate health hazard to the public water supply, the Company shall immediately discontinue water service by removing the water meter without prior notice when a Water User is found to have provided false information on a survey when that false information avoids the installation of a backflow preventer because of the presence of an Auxiliary Water Supply as defined in Section 2.5, above.
- 7.1.2 The Company shall not resume service until an Approved Backflow Preventer has been installed and tested in accordance with this Policy.
- 7.1.3 The Customer shall pay all rates, fees, including meter reinstallation fees and penalties by certified check or money order prior to having water service re-established.

### 7.2 DISCONTINUANCE OF SERVICE REQUIRED

Notwithstanding any other ordinance or provision of law, when any of the following conditions apply, the Company shall discontinue water service after providing the Water User with five days notice:

- 7.2.1 A Water User who has been notified that a backflow preventer must be installed and tested within a specified period and fails to file a written report for the testing of the backflow preventer within ten calendar days after the test period specified in the notice.
- 7.2.2 A Water User having a backflow preventer fails to file a written report for the annual Water User testing of their backflow preventer within ten calendar days after the annual test period specified in this ordinance.

7.2.3 A properly identified employee or agent of the Company is denied right of entry during usual business hours to inspect Premises in the performance of their duty to provide assurance that the continuation of water service to the Premises will not constitute a menace to the health, safety and welfare of other Water Users.

#### 7.3 CHARGES AND FEES

- 7.3.1 Failure to file the annual test report by the stated deadline in accordance with Section 5.5.1 shall result in a \$125.00 late charge. The charge shall be applied to the water bill that immediately follows the deadline for filing of the annual test report.
- 7.3.2 Filing of a false or misleading survey shall result in a \$250.00 fee.
- 7.3.3 When an auxiliary water source has been installed and the Company was not notified prior to the installation of the auxiliary source, a fee of \$175.00 shall be charged.
- 7.3.4 All late charges and fees under this section shall be applied to the Customer's water bill that immediately follows the event warranting the charging of the fee. The late charges and fees are designed to recover the Company's costs of administering this ordinance.

### SECTION 8: CONFLICT WITH OTHER ORDINANCES AND LAWS; EFFECTIVE DATE; POSTING

#### 8.1 SEVERABILITY

If any part of this policy is found to be unlawful by a court of competent jurisdiction, only that portion found to be unlawful is null and void. All other sections, subsections and provisions of the policy shall remain in full force and effect.

### 8.2 EFFECTIVE DATE

This policy shall be effective immediately after enacted by the Board of Directors.

### 8.3 POSTING

The Secretary shall post this ordinance on the Company's website within ten (10) days of adoption.

Adopted on June 22, 2019 by vote of the Board of Directors