

Highlands Water Company
CLEARLAKE, STATE OF CALIFORNIA

ORDINANCE NO. 1

CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION PROGRAM

BE IT ORDAINED BY THE BOARD OF DIRECTORS OF HIGHLANDS WATER COMPANY AS FOLLOWS:

SECTION I. PURPOSE, FINDINGS AND AUTHORITY

- a. Title 17, Sections 7583 through 7605 of the California Code of Regulations, entitled "Protection of Public Water System at Service Connection," provides rules and regulations governing Cross-Connections.
- b. Title 17, Section 7584 of the California Code of Regulations provides in part; "The water suppliers shall protect ". The District is a water supplier within the meaning of Title 17, Section 7583 of the California Code of Regulations.
- c. In order to provide for an orderly and adequate means of protection of the District Water system from Backflow, the requirements set forth below are reasonable and necessary for the protection of the District Water system and the public health and welfare. New Service Connections shall be installed, and existing service Connections shall be modified to conform to the requirements provided herein.

1.2 FINDINGS

In adopting this Ordinance, the Board of Directors make the following findings:

- 1.2.1 The District 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 boundaries.
- 1.2.2 A significant portion of the service connections within the District consist of residences used on a part-time basis. Water is allowed to stand in pipes, tanks and similar receptacles, which may cause the water to deteriorate.
- 1.2.3 The Environmental Protection Agency has reported the potential for backflow is significantly increased when the terrain is not flat. Within the District, there is significant variance in height.
- 1.2.4 Many 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 District's system.

1.3 AUTHORITY

This Ordinance is adopted to satisfy the requirements set forth in the District's operating permit issued by the California Department of Public Health, Drinking Water Field Operations Branch and Title 17 of the California Code of Regulations.

1.4 Incorporation of Title 17 of the California Code of Regulations

The regulations of the Department of Public Health, Title 17 of the California Code of Regulations, Sections 7583 through 7605, as amended from time to time, are hereby adopted, incorporated by reference herewith and made a part hereof, insofar as the same are applicable to the protection of the District Water Supply.

SECTION 2: DEFINITIONS

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

- 2.1 "Account" refers to the District's records of ownership, Customer information, billing, meter history and service supplied by the District to any Premises.

- 2.2 "Customer" means any person or entity that is connected to the District's water system.
- 2.3 "District" refers to Highlands 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 California 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 Highlands Water 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 District'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 boundaries of the District.
- 2.9 "Public Water Supply" is the water supply provided by Highlands Water Company.
- 2.10 "User Connection" is the point of connection of a user's piping to the District's water supply.
- 2.11 "Water User" is any person or entity obtaining water from Highlands Water Company.
- 2.12 Algae Spray Pumps
"For Algae Spraying Only"
"No Irrigation or other uses are allowed"
A list of safeguards that must be adhered to for pumps used to spray algae without an approved cross connection device:
1. Algae spray pumps are not allowed on land.
 2. Algae spray pumps shall be placed so a clear and unobstructed view of the pump is maintained from the lake, realizing inspection will take place.
 3. Algae spray pumps shall be painted fluorescent purple (the color prescribed in the 1994 U.B.C. for non-potable water supplies).
 4. These pumps shall be labeled with the following safeguards:
"For Algae Spraying Only" "No irrigation or other uses are allowed"

5. All algae spray pumps shall be registered with the water purveyor prior to installation. If installation has already taken place, the water purveyor shall be notified of the pump hook up as soon as possible but no later than 45 days after notice of this requirement.
6. All service connections with algae spray pumps shall be equipped with an approved back-flow prevention device.
7. Violations of the above provisions shall result in an immediate termination of service. The water supply shall not be turned on until the property and/or structure served is equipped with an approved backflow prevention device.

SECTION 3: CROSS-CONNECTION AND BACKFLOW PREVENTION PROGRAM DIRECTOR

The District's General Manager is responsible for administering the District's cross connection and backflow prevention program.

SECTION 4: CONDITIONS REQUIRING AN APPROVED BACKFLOW PREVENTER; PRIOR TO INSTALLATION OF AUXILIARY WATER SOURCE

4.1 EVALUATION OF EXISTING CONDITIONS

The District's General Manager shall evaluate the degree of potential health hazard to the public water supply, which may be created as a result of conditions existing on said premises. The District, 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 District's General Manager 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 District 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 re-established.

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 littoral rights.
- 4.2.2 Premises where substances harmful to health are handled under pressure in a manner that could permit their entry into the 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 re-established
- 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 AUXILIARY WATER SOURCE

- 4.3.1 Any Water User that adds an Auxiliary Water Supply shall notify the District 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 District prior to installing any auxiliary water source.

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 District's General Manager 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 within 15 calendar days of the date of notification, unless otherwise specified by the General Manager. A plumbing permit is required to install a backflow preventer.
- 5.1.4 The Customer or owner of the Premises is responsible for all costs associated with the purchase, installation, maintenance 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 5.2.9, inclusive. The District reserves the right to require an increased level of protection when, in the judgment of the District, the increased level of protection serves to protect the integrity of the District's water supply. Situations that are not covered herein shall be evaluated on a case-by-case basis and the District's General Manager 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 District's system require AG protection. Premises where

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 District'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 District and is connected to 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 re-established 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 herein.

5.4 TESTING

- 5.4.1 Each backflow preventer shall be tested during a three-month period between April 1st and June 30th of each calendar year or more frequently if determined necessary by the District 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.
- 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 District shall include a reminder of such testing on the water bills mailed in April and May of each year. In addition, a reminder letter is to be mailed via First Class Mail (no proof of mailing required) to each premise with a registered backflow preventer in March and a final notice to comply is to be delivered to the premise in July to any noncompliant registered Water Users.
- 5.4.4 All testing of backflow preventers shall be completed by a Certified Tester no later than June 30th of each calendar year.

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 District for a minimum of three years.

5.6 RESPONSIBILITY FOR INSTALLATION, MAINTENANCE AND TESTING OF BACKFLOW PREVENTERS

The District 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 PROHIBITED; 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 District has the right to conduct a periodic survey to identify any Premises where conditions may create a hazard to the Public Water Supply.
- 6.1.2 If enforced, the survey shall be conducted by mail in July of every fifth year beginning in 2019.
- 6.1.3 The survey shall be mailed to every premise that does not have 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 of the date listed on said notification.
- 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 PROHIBITED

- 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 District shall immediately follow Section 7.1 herein along with all applicable provisions of this ordinance.

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 District may have, the District's General Manager 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 General Manager or the General Manager's 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 REQUIRED; 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 District believes there is a potential for an immediate health hazard to the public water supply, the District 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 and/or when that false information avoids the installation of a backflow preventer because of the presence of an Auxiliary Water Source as defined in Section 2.5, above.

- 7.1.2 The District shall not resume service until an Approved Backflow Preventer has been installed and tested in accordance with this ordinance.
- 7.1.3 The Customer shall pay all rates, fees, including meter reinstallation fees and penalties by certified check, cash, credit card 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 District 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 District is denied right of entry during business hours to inspect the 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.

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

8.1 CONFLICT WITH OTHER ORDINANCES AND RESOLUTIONS

- 8.1.1 All other ordinances or resolutions in conflict herewith are repealed to the extent of such conflict and not further.

8.2 SEVERABILITY

If any part of this ordinance 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 ordinance shall remain in full force and effect.

8.3 EFFECTIVE DATE

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

8.4 POSTING

The Secretary shall post this Ordinance on the District's website and in three (3) public places within ten (10) days of adoption.

Certification

The foregoing ordinance was introduced before the Board of Directors of Highlands Water Company at a regularly scheduled public meeting held thereof on the 31st day of January, 2018 and adopted by the Board of Directors at a regularly scheduled public meeting held thereof on the 28th day of February, 2018 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

By: _____

Attest: _____

(Seal)