ORDINANCE NO. 41

AN ORDINANCE OF THE CASTROVILLE COUNTY WATER DISTRICT INSTITUTING A CROSS-CONNECTION CONTROL PROGRAM TO PROTECT THE PUBLIC WATER SYSTEM

BE IT ORDAINED, by the Board of Directors of the Castroville County Water District, Monterey County, California, as follows:

SECTION I. PURPOSE

The purpose of this ordinance is (1) to protect the public water supply against actual or potential cross-connection by isolating within the customer's premise contamination which 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 which are not approved as safe and potable for human consumption; (3) to eliminate cross-connections between drinking water systems and sources of contamination; and (4) to prevent the making of cross-connections in the future.

These regulations are adopted to implement the State of California Administrative Code, Title 17 - Public Health entitled "Regulations Relating to Cross-Connections."

Pursuant to State Law and Regulations, 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 and any other source of water supply or to maintain any sanitary fixtures 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 Customer of the District.

Section II. DEFINITIONS

A. Air-Gap Separation: The term "air-gap separation" means a physical break between a supply pipe and a receiving vessel. The

air-gap shall be at least double the diameter of the supply pipe measured vertically above the top rim of the vessel, in no case less than one inch.

B. Approved Backflow Prevention Device: The term "approved backflow prevention device" shall mean devices which have passed laboratory and field evaluation tests performed by a recognized testing organization which has demonstrated their competency to perform such tests to the California Department of Health Services.

C. Approved Water Supply: The term "approved water supply" means any water supply whose potability is regulated by State or local health agency.

D. Auxiliary Supply: The term "auxiliary supply" means any water supply on or available to the premises other than the approved water supply.

E. AWWA Standard: The term "AWWA Standard" means an official standard developed and approved by the American Water Works Association (AWWA).

F. Backflow: The term "backflow" shall mean 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 or sources other than any approved water supply source. Backsiphonage is one cause of backflow. Back pressure is the other cause.

G. Contamination: The term "contamination" means 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.

H. Cross-Connection: The term "cross-connection," as used in this Ordinance, means 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 water or a substance that is not or cannot be approved as safe, wholesome and potable. By-pass arrangements, jumper connections, removable sections, swivel or changeover devices, or other devices through which backflow could occur, shall be considered to be cross-connections.

I. Double Check Valve Assembly: The term "double check valve assembly" means 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.

J. Health Agency: The term "health agency" means the California Department of Health Services or the local health agency with respect to a small water system.

K. Local Health Agency: The term "local health agency" means the county or city health authority.

L. Person: The term "person" means an individual, corporation, company, association, partnership, municipality, public utility, or other public body or institution.

M. Premise: The term "premise" means any and all areas on a customer's property which are served or have the potential to be served by the public water system.

N. Public Water System: The term "public water system" means 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 25 individuals daily at least 60 days out of the year.

O. Reclaimed Water: The term "reclaimed water" means a wastewater which as a result of treatment is suitable for uses other than potable use.

P. Reduced Pressure Principle Backflow Prevention Device: The term "reduced pressure principle backflow prevention device" means a device 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 two check valve assembly and equipped with necessary test cocks for testing.

Q. Service Connection: The term "service connection" refers to the point of connection of a user's piping to the District's facilities.

R. Water Supplier: The term "water supplier" means the Quartz Hill Water District which owns or operates the approved water supply system.

S. Water User: The term "water user" means any person obtaining water from an approved water supply system.

SECTION III. CROSS-CONNECTION PROTECTION REQUIREMENTS

A. 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 device by and at user's 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 device. The type of device to be installed will be in accordance with the requirements of this ordinance.

B. Where Protection is Required:

1. Each service connection from the District 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 unless the auxiliary water supply is accepted as an additional source by the District and is approved by the public health agency having jurisdiction.

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 may allow its entry into the water system shall be protected against backflow of the water from the premesis into the public system. This shall include the handling of process waters and waters originating from the District's water system which have been subjected to any possibility of deterioration in sanitary quality.

3. Backflow prevention devices shall be installed on the service connection to any premises having (a) internal cross-connections 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 impracticable or impossible to ascertain whether or not cross-connections exist.

C. Type of Protection Required:

1. The type of protection which shall be provided to prevent backflow into the approved water supply shall be commensurate with the degree of hazard which exists on the Customer's premises. The types of protective devices which 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 approved water supply, at the user's water connection to premises with varying degrees of hazard are given in Table 1. 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.

Table 1

TYPE OF BACKFLOW PROTECTION REQUIRED

Degree of Hazard	Minimum Type of Backflow Prevention
(a) Sewage and Hazardous Substances	
(1) Premises where the public water system is used to supplement the reclaimed water supply.	AG
(2) Premises where there are wastewater pumping and/or treatment plants 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 reclaimed water is used and there is no interconnection with the potable water system. An RP may be provided in lieu of an AG if approved by the health agency and the District.	AG

(4) Premises where hazardous substances are handled in any manner in which the 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

(5) Premises where there are irrigation systems into which fertilizers, herbicides or pesticides are, or can be, injected RP

(b) Auxilary Water Supplies

(1) Premises where there is an unapproved auxiliary water supply which is interconnected with the public water system. An RP or DC 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 District. RP

(C) 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). DC

(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 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. DC

(d) Dockside Watering Points and Marine Facilities

(1) Pier hydrants for supplying water to vessels for any purpose. RP

(2) Premises where there are marine facilities. RP

(e) 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. RP

(f) Premises where there is a repeated history of cross-connections being established or re-established. RP

2. Two or more services supplying water from different street mains to the same building, structure or premises through which an interstreet main flow may occur, shall have at <u>least</u> a standard check valve on each water service to be located adjacent to and on the property side of the respective meters. Such 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 devices at such services at such service connections shall be required.

SECTION IV. BACKFLOW PREVENTION DEVICES

A. Approved Backflow Prevention Devices

1. Only backflow prevention devices which have been approved by the District 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 devices.

B. Backflow Prevention Device Installation

1. Backflow prevention devices shall be installed in a manner prescribed in Section 7603, Title 22 of the California Administrative Code. Location of the devices should be as close as practical to the user's connection. The District shall have the final authority in determining the required location of a backflow prevention device.

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 (2) pipe diameters of the supply inlet but in no case less than one (1) inch above the overflow rim of the receiving tank.

b. Reduced pressure principle backflow prevention device (RP). The approved reduced pressure principle backflow prevention device shall be installed on the user's side of and as close to the service connection as is practical. The device shall be installed a minimum of twelve inches (12") above grade and not more than thirty-six inches (36") above grade measured from the bottom of the device and with a minimum of twelve inches (12") side clearance. The device shall be installed so that it is readily accessible for maintenance and testing. Water supplied from any point between the service connection and the RP device shall be protected in a manner approved by the District.

c. Double check valve assembly (DC). The approved double check valve assembly shall be located as close as practical to the user's connection and shall be installed above grade, if possible, and in a manner where it is readily accessible for testing and maintenance. If a double check valve assembly is put below grade, it must be installed in a vault such that there is a minimum of six inches (6") between the bottom of the vault and the bottom of the device, so that the top of the device is no more than a maximum of eight inches (8") below grade, so there is a minimum of six inches (6") of clearance between the other side of the device with the test cocks and the side of the vault, and so there is a minimum of three inches (3") clearance between the other side of the device and the side of the vault. Special consideration must be given to double check

valve assembles of the "Y" type. These devices must be installed on their "side" with the tests cocks in a vertical position so that either check valve may be removed for service without removing the device. Vaults which do not have an integrated bottom must be placed on a three inch (3") layer of gravel.

C. Backflow Prevention Device Testing and Maintenance

1. The owners of any premises on which, or on account of which, backflow prevention devices are installed, shall have the devices tested by a person who has demonstrated competency in testing of these devices to the District. Backflow prevention devices 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 determined to be necessary. No device shall be placed back in service unless it is functioning as required. A report in a form acceptable to the District shall be filed with the District each time a device is tested, relocated or repaired. These devices 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. The District will supply affected water users with a list of persons acceptable to the District to test backflow prevention devices. The District will notify affected customers by mail when annual testing of a device is needed and also supply users with the necessary forms which must be filled out each time a device is tested or repaired.

3. Upon request the District will test a customer's backflow prevention device to fulfill the requirements of this ordinance. The customer will be charged for the test and any maintenance found necessary to keep the device in working order on the next regular water bill.

D. Backflow Prevention Device Removal

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

   a. Removal: The use of a device may be discontinued and the device 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.

   b. 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.

   c. 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.

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

SECTION V. USER SUPERVISOR

At each premises where it is necessary, in the opinion of the District, 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 devices and for avoidance of cross connections. In the event of contamination or polllution 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 supervisor's identity on, as a minimum, an annual basis and whenever a change occurs.

SECTION VI. ADMINISTRATIVE PROCEDURES

A. Water System Survey

1. The District shall review all requests for new services to determine if backflow protection is needed. Plans and specifications must be submitted to the District 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 device is necessary to protect the public water system, the required device must be installed before service will be granted.
2. The District may require an on-premise inspection to evaluate cross-connection hazards. The District will transmit a written notice requesting an inspection appointment to each affected water user. Any customer which cannot or will not allow an on-premise inspection of their piping system shall be required to install the backflow prevention device the District considers necessary.

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

B. Customer Notification - Device 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 (60) days will be given to complete all corrective action required including installation of backflow prevention devices.

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 (60) day period allowed. The second notice will give the water user a two (2) week period to take the required corrective action. If no action is taken within the two (2) week period, the District may terminate water service to the affected water user until the required corrective actions are taken.

C. Customer Notification - Testing and Maintenance

1. The District will notify each affected water user when it is time for the backflow prevention device installed on their service connection to be tested. This written notice shall give the water user thirty (30) days to have the device tested and supply the

water user with the necessary form to be completed and resubmitted to the District.

2. A second notice shall be sent to each water user which does not have the backflow prevention device tested as prescribed in the first notice within the thirty (30) day period allowed. The second notice will give the water user a two (2) week period to have the backflow prevention device tested. If no action is taken within the two (2) week period, the District may terminate water service to the affected water user until the subject device is tested.

SECTION VII. WATER SERVICE TERMINATION

A. 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's water service.

B. Basis for Termination

Conditions 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 device.
2. Refusal to test a backflow prevention device.
3. Refusal to repair a faulty backflow prevention device.
4. Refusal to replace a faulty backflow prevention device.
5. Direct or indirect connection between the public water system and a sewer line.

6. Unprotected direct or indirect connection between the public water system and a system or equipment containing contaminants.

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

8. A situation which presents an immediate health hazard to the public water system.

C. Water Service Termination Procedures

1. For conditions 1, 2, 3 or 4 the District will terminate service to a customer's premise after two (2) 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 4, 5, 6, 7 or 8 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.

SECTION VIII REQUIREMENTS FOR THE CERTIFICATION AS A BACKFLOW PREVENTION DEVICE TESTER

Each applicant for certification as a tester of backflow prevention devices shall file an approved application with the District Secretary, together with a fee as may be established by the District Board of Directors.

Competency in all phases of backflow prevention device testing and repair must be demonstrated by means of education and/or experience in order to obtain certification.

The following are minimum requirements:

a. Applicants shall have had at least two (2) years experience in plumbing or pipe fitting or equivalent qualifications.

b. Hold a valid certification from the American Water Works Association (A.W.W.A.) California-Nevada Section, from a County certification program or have equivalent training in the opinion of the District and the Health Department.

c. Each applicant for certification as a tester of backflow prevention devices shall furnish evidence to show that he has available the necessary tools and equipment to properly test such devices. He shall be responsible for the competency and accuracy of all tests and reports prepared by him. The certificate issued to any tester is valid for a period of one (1) year and may be revoked, suspended or not renewed by the District for improper testing, repairs and/or reporting.

SECTION IX. SERVICE APPLICATION AS CONTRACT

The existing Water Ordinance of the District contains regulations relating to cross-connections and provides that the application for service constitutes a contract between the applicant and the District whereby the applicant, as a condition of service, agrees to abide by all Ordinances, Rules and Regulations of the District. To the extent of any inconsistencies with the existing cross-connections regulations this Ordinance shall be applicable to cross-connections. The provisions of this Ordinance, including provisions relating to inspection of cross-connection devices shall also constitute an undertaking on the part of the customer to abide by all

Ordinances as well as all other Rules, Regulations and Ordinances of the District.

SECTION X. SEVERABILITY

If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance, or any part thereof, is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this Ordinance or any part thereof. The Board hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, subdivision, paragraphs, sentences, clauses, or phrases be declared invalid.

SECTION XI.

The Secretary is hereby ordered and directed to cause copies of this Ordinance to be posted in three (3) public places within the boundaries of the Castroville County Water District.

SECTION XII.

This Ordinance shall take effect thirty (30) days from the date of its passage.

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CERTIFICATE OF SECRETARY

I hereby certify that the foregoing Ordinance was duly and regularly adopted and passed by the Board of Directors of the Castroville County Water District, Monterey County, California, at a meeting thereof held on the 12th day of July, 1988, by the following vote of the Members thereof:

AYES, and in favor thereof, Directors: Ausonio, DeSante, ~~Sarmento~~, ~~Tonus~~, Tottino

NOES, Directors:

ABSENT, Directors: Tonus + Sarmento

Frances Estanza
Secretary
Castroville County Water District
(SEAL)

Les Tottino
Pres. Pro Tem. Castroville County Water District