

ORDINANCE NO. 429

AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE OLIVENHAIN MUNICIPAL WATER DISTRICT RESCINDING ORDINANCE NO. 397 AND REVISING THE RULES AND REGULATIONS GOVERNING CROSS CONNECTION CONTROL TO PROTECT THE PUBLIC WATER SYSTEM

It is HEREBY ORDAINED by the Board of Directors of the Olivenhain Municipal Water District (District) as follows:

SECTION 1: Purpose/Responsibility/Authority.

Authority:

This Ordinance is adopted pursuant to, inter alia, the District's authority according to the Municipal Water District Law of 1911, as well as Title 17, Chapter V, Section 7583 through Section 7605, of the California Code of Regulations entitled "Regulations Relating to Cross-Connections," which sets forth rules and regulations governing cross-connections.

Purpose:

1. To protect the public water system from actual or potential cross-connections between the public potable water system and the water users' private plumbing system.
2. To eliminate existing connections between potable water systems and other sources of water which are not approved as safe and potable for human consumption.
3. To provide for a continuing program of cross-connection control which systematically and effectively prevents the contamination or pollution of the public potable water system within the District's boundaries.

Responsibility:

The Board shall be responsible for the protection of the District's system from pollution or contamination due to backflow conditions through the metered water service connections.

SECTION 2: Prohibition.

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 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 water user of the District.

SECTION 3: Definitions.

- A. ABPA. The term "ABPA" is defined as American Backflow Prevention Association.
- B. Air Gap Separation. The term "air-gap separation" is defined as 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. Wherever used in this Ordinance, the term "air-gap separation" shall mean an installation inspected and approved according to the requirements of this Ordinance.
- C. Approved Backflow Prevention Assembly. The term "approved backflow prevention assembly" is defined as an assembly which has 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 Public Health.
- D. Approved Water Supply. The term "approved water supply" is defined as any water supply whose potability is regulated by the State or local health agency.
- E. Auxiliary Supply. The term "auxiliary supply" is defined as any water supply on or available to the premises other than the approved water supply.
- F. AWWA Standard. The term "AWWA Standard" is defined as the official standard developed and approved by the American Water Works Association (AWWA).
- G. Backflow. The term "backflow" shall mean the undesirable reversal of flow of water (or other liquids, mixtures or substances) caused by backpressure or a backsiphonage condition into the District's public potable water system from any source or sources other than its intended source.
- H. Backpressure. The term "backpressure" shall mean any elevation pressure in the downstream piping system (by pump, elevation of piping or steam and/or air

pressure) above the District's supply pressure at the point of water service connection. This would tend to cause an unapproved water source to enter into the District's potable water supply.

- I. Backsiphonage. The term "backsiphonage" is a backflow condition caused by a reduction in District system pressure which causes a negative or sub-atmospheric pressure. This would tend to cause an unapproved water source to enter into the District's water supply.
- J. Certified Backflow Prevention Assembly Tester. The term "Certified Backflow Prevention Assembly Tester" shall mean a backflow assembly tester who is certified by the American Backflow Prevention Association (ABPA) or American Water Works Association (AWWA) to test and certify approved backflow prevention assemblies.
- K. Contamination. The term "contamination" shall mean 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.
- L. Cross-Connection. The term "cross-connection" as used in this Ordinance shall mean 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 assemblies, or other assemblies through which backflow could occur, shall be considered to be cross-connections.
- M. Days. The term "days" shall mean calendar days.
- N. District. The term "District" shall mean the Olivenhain Municipal Water District and references in this document where action is to be taken by the District shall mean action taken by the General Manager of the District or his/her approved representatives.
- O. Double Check Valve Assembly. The term "double check valve assembly" shall mean an assembly of two internally loaded, independently acting check valves, including resilient seated shut-off valves on each end of the assembly and test cocks for testing the water tightness of each check valve.
- P. Health Agency. The term "health agency" shall mean the California Department of Public Health or the local health agency with respect to a small water system.
- Q. Local Health Agency. The term "local health agency" shall mean the County of San Diego Department of Environmental Health.

- R. Person. The term "person" shall mean an individual, corporation, company, association, partnership, municipality, public utility, or other public body or institution.
- S. Premises. The term "premises" shall mean any and all areas on a water user's property which are served or have the potential to be served by the public water system.
- T. Recycled Water. The term "Recycled water" shall mean a wastewater which, as a result of treatment, is suitable for uses other than potable use.
- U. Reduced Pressure Principle Backflow Prevention Assembly. The term "reduced pressure principle backflow prevention assembly" shall mean an assembly incorporating two internally loaded, independently operating check valves and an automatically operating differential relief valve located between the two checks, including resilient seated shutoff valves on each end of the assembly, and equipped with necessary test cocks for testing the assembly.
- V. Service Connection. The term "service connection" refers to the point of connection of a user's piping to the water suppliers' facilities.
- W. User Supervisor. The term "user supervisor" refers to the person responsible for the monitoring of the backflow prevention assemblies and for avoidance of cross-connections.
- X. Water Supplier. The term "water supplier" shall mean the person who owns or operates the approved water supply system.
- Y. Water User. The term "water user" shall mean any person obtaining water from the District's water supply system.

SECTION 4: Cross Connection Protection Requirements.

- A. General Provisions.
 - 1. Unprotected cross-connections with the public water supply are prohibited.
 - 2. Whenever backflow protection is determined by the District to be necessary, the water user shall install an approved backflow prevention assembly at his/her sole expense. User compliance is an express condition of continued water service or establishment of a new water service connection.

3. Wherever backflow protection has been found, in the judgment of the District, to be 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 Ordinance.

B. Where Protection is Required.

1. Each service connection from the District's water system that is 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 that is 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 premises into the public system. This shall include the handling of process waters and water originating from the District water systems 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-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 that shall be provided to prevent backflow into the approved water supply shall be commensurate with the degree of hazard that exists on the water user's premises. The type of protective assembly that may be required includes a Reduced Pressure Principle Backflow Prevention Assembly (RP) or an Air-Gap Separation (AG).
2. Unless the District finds that no actual or potential hazard to the public water supply system exists, an approved backflow prevention device shall be installed on each service connection to a water user's water system serving, but not limited to, the following types of facilities and uses:

1. Hospitals, mortuaries, clinics, nursing homes;
2. Laboratories;
3. Sewage treatment plants, sewage pumping stations or storm water pumping stations;
4. Food and beverage processing plants;
5. Chemical plants;
6. Metal plating industries;
7. Petroleum processing or storage plants;
8. Carwashes;
9. Churches;
10. Farm service and fertilizer plants and trucks;
11. Dental offices;
12. Radiator shops;
13. Commercial laundries;
14. Photographic film processing facilities;
15. Veterinary and animal grooming clinics;
16. Taxidermists;
17. Ready-mix concrete plants;
18. Sand and gravel plants;
19. Schools;
20. Water services dedicated for landscape irrigation systems;
21. Fire protection systems;
22. Greenhouses;
23. Water tank trucks or water tanks filled from fire hydrants that do not have a visible air gap;
24. Mobile home parks and/or apartment complexes;
25. Commercial or industrial users;
26. Recycled water sites, including post meter protection;
27. Golf Courses (including irrigation facilities and club houses);
28. Agriculture;
29. Structures of three or more stories;
30. Auxiliary Water Supplies;
31. Grey Water Systems;
32. Interconnects;
33. Other uses as determined by the District.

SECTION 5. Backflow Prevention Assemblies.

A. Approved Backflow Prevention Assemblies.

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

2. Upon request, the District will provide to any affected water user a list of Certified Backflow Prevention Assembly Testers and a list of approved backflow prevention assemblies.

B. Backflow Prevention Assembly Installation.

1. Backflow prevention assemblies shall be installed according to the District's Standard Drawings and Specification and in a manner prescribed in Section 7603, Title 17 of the California Code of Regulations. Location of the assemblies shall be 18' downstream of the meter ball valve or as determined by the District. The District shall have the final authority in determining the required location of a 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 above the receiving tank 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 Assembly (RP). The approved reduced pressure principle backflow prevention assembly shall be installed on the user's side of and as close to the service connection as is practical. The assembly 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 assembly shall be protected in a manner approved by the District.

C. Backflow Prevention Assembly Testing and Maintenance.

1. It shall be the sole responsibility of the water user to install all required assemblies in accordance with the District's Standard Drawings and Specifications. Initial inspections and a backflow assembly test of all approved backflow prevention assemblies shall be performed by the District. Thereafter, it shall be the sole responsibility of the water user at any premises where backflow prevention assemblies requiring annual testing are installed to have certified inspections and operational tests made at least once per year. 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 water user, and shall be performed by an approved Certified Backflow Tester.

It shall be the duty of the District to see that these annual backflow tests are made. These devices shall be repaired, overhauled or replaced at the sole expense of the water user whenever said devices are found to be defective. Records of such tests, repairs, and overhaul shall be submitted to the District on a backflow testing and standard maintenance form provided by the District. Any approved backflow prevention assembly shall be the property of the water user and the District shall have no responsibility or liability for the cost of operation, maintenance, repair or replacement thereof. The water user shall maintain the physical condition of the backflow prevention assemblies and shall be solely responsible for any claims that may arise from injuries or damages caused by the assemblies.

2. The District will supply affected water users with a list of persons acceptable to the District to test backflow prevention assemblies. The District will notify affected water users by mail or email when annual testing of an assembly is needed and also supply users with the necessary forms which must be filled out each time an assembly is tested or repaired. The Certified Backflow Prevention Assembly Tester shall provide both the water user and the District with a copy of the test results.

D. Backflow Prevention Assembly Removal.

1. Written 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 only upon determination by the District that a hazard no longer exists or is not likely to be created in the future.
 - 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 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 water use is discontinued until the replacement assembly is installed. All replacement assemblies must be in compliance with this Ordinance. All notices regarding replacement shall be made in writing to the District and sent to the Engineering Department Assistant. The District will provide written notice back regarding its decision.

E. Upgrading Existing Approved Backflow Prevention Assemblies.

The District may require the water user to upgrade an existing backflow prevention assembly which, in the opinion of the District, is a type that does not provide adequate protection for the degree of hazard which exists on the water user's premises. The upgrade shall be at water user's sole expense and may include complete replacement and relocation of the backflow prevention assembly and/or the installation of additional devices.

Upgrading Existing Approved Backflow Detector Check Assemblies and Single Detector Check Assemblies.

Reasons for replacement are as follows, but not limited to:

- a. Inadequate protection for the degree of hazard which exists.
- b. Improper sizing for new fire system requirements.
- c. Mechanical failure.
- d. Corrosion.

All installations are required to meet the District's Current Standard Specifications. The District may also require excavation of an existing installation to verify that the proper materials are used and that no cross connections exist prior to the new installation.

F. Fire Detector Checks.

Double Check Detector Assemblies (DCDA) and Reduced Pressure Detector Assemblies (RPDA) are the only detector check backflow prevention assemblies approved for backflow protection by the District. Single Check Fire Detector Assemblies are not an approved backflow prevention assembly and are not approved for use. Requirements for the installation of Fire Detector Checks are listed below:

- A. Prior to the installation of any fire protection system, submit plans to the District for approval. Plans submitted to the District shall have the approval of the Fire Marshal who has jurisdiction of the premises. Plans received by

the District without Fire Marshals approval will be returned without review for re-submittal. Accordingly, a backflow prevention device shall be installed for all new commercial underground water supply systems.

- B. All installations of backflow protection assemblies shall be inspected and approved by the District prior to placing the fire system in service.
- C. All costs for the installation, inspection, testing, and maintenance of the backflow prevention assemblies shall be the sole responsibility of the water user.
- D. The water user shall maintain the physical condition of the fire detector check assemblies and shall be solely responsible for any claims that may arise from injuries or damages caused by the fire detector check assemblies.

G. Existing Non-Conforming Fire Detector Check Assemblies.

There are currently a number of fire detector check devices in use at properties within the District which do not meet the standards for backflow protection as described in this Ordinance. These detector checks do not provide an acceptable level of protection for the potable water system from various hazards present in commercial fire protection systems. These hazards include degraded water quality in the sprinkler systems, iron bacterium, as well as lead concentrations above acceptable levels in the detector check devices themselves. It is the finding of the District that these devices pose a threat to the public water supply and that all non-conforming commercial fire detector checks must be replaced at the sole expense of the property owner and/or water user. A list of water accounts by meter number with backflow prevention assemblies which require replacement is attached as Exhibit A.

As the replacement of these devices may constitute a significant expense, the District will allow a grace period of five (5) years beginning August 8th, 2012 for water users/owners to replace non-conforming devices with devices that meet the requirements of this Ordinance. The District will notify all water users and property owners affected by this requirement by certified mail within 30 days of the effective date of this Ordinance and on an annual basis in August of each year until such time as the grace period has elapsed. Any water user who fails to comply with this requirement is subject to water service termination in accordance with this Ordinance.

SECTION 6. User Supervisor.

At each premise where it is necessary, in the opinion of the District, a User Supervisor shall be designated by, and at the sole expense of, the water user. This User Supervisor shall be responsible for the monitoring of the backflow prevention assemblies and for 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 notified by the User Supervisor immediately upon discovery 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, at a minimum, an annual basis and whenever a change occurs.

SECTION 7. 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 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-premise inspection to further evaluate cross-connection hazards. The District will notify the affected water user for the need of inspection. If, in the judgment of the District, an approved backflow prevention device is required at any metered water service connection for the safety of the District system, the District shall give notice in writing to the affected water user to install an approved backflow prevention device at each of the water user's metered water service connections. Within the time prescribed by the District, the water user shall install such approved device or devices at the water user's sole expense. Failure, refusal or inability on the part of the water user to install said device or devices shall immediately constitute grounds for discontinuing water service to such metered water service connections until such device or devices have been properly installed.
3. The District may, at its sole discretion, require a re-inspection for cross-connection hazards of any premise to which it serves water. The District will notify in writing the affected water user of the need for inspection. Any water user who cannot or will not allow an on-premise inspection of his/her piping system may be required to install the backflow prevention assembly the District considers necessary. Failure, refusal or inability on the part of the water user to install said device or devices shall immediately constitute

grounds for discontinuing water service to such metered water service connections until such device or devices have been properly installed.

4. All water user systems shall be open for inspection at all reasonable times to authorized representatives of the District to enable the District to ascertain the existence of cross-connection or other structural or sanitary hazards, including violations of this Ordinance. 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 water user 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.

B. Water User Notification—Approved Backflow Prevention Assembly Installation

1. If the survey completed in 7A identifies corrective action, the District will notify the water user of the survey findings, listing the corrective actions to be taken. A period of thirty (30) days will be given to complete all corrective actions required, including installation of backflow prevention assemblies. Failure, refusal or inability on the part of the water user to install said device or devices shall immediately constitute grounds for discontinuing water service to such metered water service connections until such device or devices have been properly installed. A 48 hour lock off notice will be given to the customer prior to discontinuing service.
2. The District may provide additional notification and/or time to make the necessary repairs as it deems necessary. This will be addressed on a case-by-case basis.

C. Water User Notification—Annual Backflow Testing and Maintenance

1. The District will notify each affected water user when it is time for the backflow prevention assembly installed on their service connection to be tested.

The notice shall contain the following information:

- a. The Backflow Assembly location and account number (or other appropriate identification numbers).
- b. A statement that the water user is responsible for providing for the routine maintenance, repair, and testing.

- c. That the testing requirement is made under the authority of the California Code of Regulations, Title 17, and this Ordinance.
 - d. A deadline of 30 days by which the assembly must be tested and repaired if necessary.
 - e. That if the water user fails to test or repair an assembly within the time period required by the notice, the District may terminate water service to the affected water user.
 - f. The District contact person, including address and phone number.
 - g. A report form for the water user to use to submit the test results.
2. A Second Notice shall be sent to each water user who does not have their backflow prevention assembly tested as prescribed in the second notice within the fifteen (15) day period allowed. The Second Notice will give the water user a five (5) day period to have their backflow prevention assembly tested. This notice shall include all information included on the First Notice, along with a report form to submit test results.
 3. A Third Notice shall be sent to each water user who does not have their backflow prevention assembly tested as prescribed in the Second Notice within the five (5) day period. The Third Notice will give the water user a 48 hour period to have their backflow prevention assembly tested. If no action is taken within the prescribed time period, the District will terminate water service to the affected water user until the subject backflow assembly is tested.

D. Water Service Termination

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 discontinue water service immediately. Such termination shall be made by the District in its sole discretion. The District will notify the affected water user in writing and by telephone, if possible.

Basis for Termination: Service of water to any premises shall not be connected to the District system unless the District system is protected as required by State laws and regulations and by this Ordinance. Service of water to any premises shall be discontinued by the District if a backflow prevention assembly required by this Ordinance is not installed, tested, and maintained, or if it is found that a backflow prevention assembly has been removed, bypassed, or if any

unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

E. Maintenance of Records

The District shall maintain such records so as to be able to effectively manage a cross-connection control program. The records shall include the following information for each backflow prevention assembly in the water system:

1. User identification information:
 - Name
 - Address
 - Account number (or other identification number)
 - Responsible person
 - Type of business;
2. The date of the most recent cross-connection survey performed at this location;
3. Type of hazard(s);
4. Location of assembly;
5. Type of assembly, including make, model, size, serial number, and recommended frequency of testing;
6. Record of testing and repairs;
7. Comments and notes on any problems with the assembly; and
8. Inspection notes.

SECTION 8. Charges.

The Board of Directors shall establish, and may from time to time alter, a schedule of fees and charges to offset the District's costs incurred under this Ordinance. It shall be the policy of the District that the water user, whose premises caused the need to protect the District water supply, shall be responsible to cover the cost of that protection, including the District's costs. Fees and charges may include, but are not limited to:

- A. The cost to initially determine the need for protection and the type of backflow assembly required.

- B. The cost to annually review compliance with this Ordinance, including any cost of inspection, testing, and certification.
- C. The cost to disconnect and/or reconnect a service because of noncompliance with this Ordinance.
- D. Any costs incurred by the District in connection with the operation, maintenance, and repair or replacement of a backflow assembly.

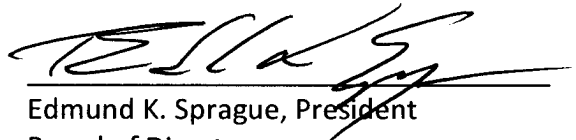
SECTION 9. Severability.

If any section, subsection, subdivision, paragraph, sentence clause, and/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, subdivisions, paragraphs, sentences, clauses and/or phrases be declared invalid.

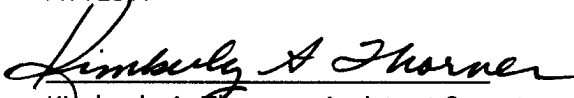
SECTION 10: Effective Date. This ordinance shall take effect and be in force immediately upon its adoption.

PASSED, ADOPTED AND APPROVED this 22nd day of July 2015 by the following roll call vote:

AYES:	Directors Sprague, Topolovac, Varty, and Watt
NOES:	None
ABSTAIN:	None
ABSENT:	Director Guerin


Edmund K. Sprague, President
Board of Directors
Olivenhain Municipal Water District

ATTEST:


Kimberly A. Thorne, Assistant Secretary
Board of Directors
Olivenhain Municipal Water District