

## ORDINANCE NO. 08-01

### AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE LINDEN COUNTY WATER DISTRICT REGULATING CROSS-CONNECTION AND BACKFLOW DEVICES

WHEREAS, The Board of Directors of the Linden County Water District ("District") adopted Ordinance No. 88-4 regulating cross-connections and backflow devices on September 14, 1988;

WHEREAS, Public Law 93-523, the Safe Drinking Water Act of 1974, and Title 17 of the California Code of Regulations, sections 7583 through 7605, entitled "Drinking Water Supplies," mandate that the District requires the installation of properly-functioning backflow prevention devices as necessary to prevent contamination of the District water system from cross-connections;

WHEREAS, it is the intent of the District to adopt standards that encompass the surveying of Customers' Premises for potential cross-connection hazards, and for the design, construction, installation and maintenance of backflow prevention assemblies; and

WHEREAS, the Board desires to replace Ordinance 88-4 for the purpose of establishing and implementing a comprehensive Cross-Connection Control Program to protect the public water supply against actual or potential contamination through cross-connection and backflow (the "Program").

NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of the Linden County Water District that a Cross-Connection Control Program be established as follows:

1. **Repeal.** The provisions of any prior ordinances, resolutions, rules or regulations governing cross-connection control within the District's boundaries that are inconsistent with the provisions of this Ordinance are hereby repealed and deemed to be of no further force or effect.

2. **Definitions.** The following definitions describe those terms and phases that are relevant to the operation and enforcement of the Program:

**2.1 Air Gap Separation:** A physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressurized receiving vessel. An approved air gap separation will be at least double the inside diameter of the supply pipe measured vertically above the top rim of the vessel, but in no case will be less than 1 inch.

**2.2 Approved Backflow Prevention Assembly:** Any assembly tested and approved by the California Department of Public Health and approved by the District for installation and use within its territory.

**2.3 Approved Water Supply:** A water system that is regulated by a state or local health agency.

- 2.4 Auxiliary Water Supply:** Any supply of water on or available to a Customer's Premises other than that supplied by the District.
- 2.5 AWWA Standard:** A standard developed and approved by the American Water Works Association ("AWWA").
- 2.6 Backflow:** A flow condition caused by a differential in pressure that causes the flow of water or other liquids, gases, mixtures or substances into the distribution system pipes of the District. Backpressure is one cause of backflow, as well as back-siphonage.
- 2.7 Cross-Connection:** An 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 substance that is not or cannot be approved as safe, wholesome and potable. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices or devices through which backflow could occur shall be considered cross-connections.
- 2.8 Customer:** Any person who receives water service from the District and who is financially responsible for paying the costs of installing and maintaining a District-approved backflow prevention device. A Customer generally will be the owner of the property where such a device is required.
- 2.9 Double Check Valve:** 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 valve.
- 2.10 Health Agency:** The California Department of Public Health or the local health officer with respect to small water systems.
- 2.11 Premises:** Any and all areas of a Customer's property that are served or have the potential to be served by the District water system.
- 2.12 Reduced Pressure Principal Backflow Prevention Device:** A device incorporating not less than two check valves, an automatic operated relief valve, located between two check valves, a tightly closing shut-off valve on each side of the check valve assembly and equipped with the test cocks for testing.
- 2.13 Service Connection:** The point of connection between a Customer's on-Premises water service line and the District water system.
- 2.14 Thermal Expansion:** Change in dimension of a material resulting from a change in temperature.

## **2.15 Water Supplier or Purveyor: The District.**

**3. Responsibility for Backflow Prevention.** Under sections 7583 through 7605 of Title 17 of the Code of California Regulations relating to cross-connection, the District has the primary responsibility to prevent water from unapproved sources or any other substances from entering the public water system. The District will insure that adequate backflow and back-siphonage protection is maintained on each Customer's water service directly connected to the District water system. Each Customer will have primary responsibility for preventing contamination and pollutants from his or her on-Premises water service facilities from entering the District's water system as required by the Program and the Health Agency.

The District will not be responsible for any loss or damage directly or indirectly resulting from or caused by any improper or negligent installation, operation, use, repair, maintenance, replacement of or interference with any approved backflow prevention assembly required to be installed and operated by any Customer or other person in accordance with the Program.

Each Customer should be aware that the installation of a backflow prevention assembly may result in a closed-plumbing system within the Customer's Premises. As such, a Customer may need to make appropriate provisions for thermal expansion within their system, i.e. the installation of thermal expansion devices and/or pressure relief valves.

A Customer shall bear all costs for installing an approved air gap separation or approved backflow protection assembly required by the Program. All air gap separations and approved backflow prevention assemblies shall be kept in good working order and in safe condition. A Customer shall repair or replace any existing device or assembly determined by the District in its sole discretion to be unapproved, defective or not providing the level of protection required by the District and applicable law. The Customer shall be responsible for obtaining any plumbing permits necessary to comply with this ordinance.

**4. Surveys and Level of Protection.** The protection that may be required to prevent backflow into the District water system shall be commensurate with the degree of risk presented by each Customer's on-Premises water service facilities. The degree of risk shall be determined by a cross-connection survey conducted on the Customer's Premises by a certified cross-connection tester approved by the District or Health Officer.

A cross-connection control survey is the first step in abating cross-connection hazards. A survey is a review of a Customer's water use practices for the purpose of identifying where the District water system is or may be interconnected with a potential source of contamination on a Customer's Premises. Such survey consists of two parts:

1. Identifying Customers who may have cross-connections on his or her Premises, and
2. Inspecting the Premises to identify actual or potential cross-connections. In cases where a Customer proposes to install a new or modified connection to the District water system, the survey may consist of reviewing the construction plans and technical specifications and/or an on-Premises survey.

Whenever possible, a District request to conduct a cross-connection survey of a Customer's Premises will be made in writing and at a mutually-agreed date and time. All factors found and recorded during a survey shall be considered in the District's determination of whether or not a backflow prevention assembly is required and if required, what level of protection is necessary. Each Customer that the District determines must install a backflow prevention assembly shall be notified by letter stating the Customer's responsibility for providing backflow protection and the type of assembly required. At a minimum, a Customer that is required to install a backflow prevention device shall install a Reduced Pressure Principle Backflow Prevention Assembly ("RP"). The District reserves the right to re-inspect the Customer's Premises at any time to ensure that the plumbing, backflow prevention assembly and/or water use has not changed.

If a Customer refuses a District request to conduct a cross-connection survey or refuses adequate access to permit an inspection of the Customer's Premises and plumbing system, the District will issue a letter requiring immediate installation of the appropriate backflow prevention assembly based upon available information concerning the Premises and water connection. If, after issuance of such a demand letter, the Customer continues to refuse to permit the District access to conduct a survey and/or to install a backflow prevention assembly deemed necessary by the District, the District shall have the right to immediately terminate water service to the Customer's Premises and if deemed necessary, to disconnect the Premises from the District water system. The District shall have no obligation to reconnect the Premises and re-commence water service until the Customer: (a) permits a cross-connection survey and if required, installs a backflow prevention device as the District deems necessary; and (2) pays all District fees and charges necessary to re-connect and re-commence water service to the Premises.

**5. New Construction.** As a condition of permitting the installation of any new water service connection, the District will conduct an on-site evaluation and/or inspection of plans during plan check and review in order to determine the type of backflow prevention necessary for the connection to be in compliance with this ordinance, if any. If installation of a backflow prevention device is required, the minimum type of assembly required to be installed will be an approved RP.

**6. Installation.** All installations of backflow prevention assemblies shall be done in accordance with the Uniform Plumbing Code's Construction Improvement Standards adopted in 2006, as the same may be amended from time to time. The Backflow Technician or other qualified employee or contractor from the District shall inspect and approve all backflow prevention assembly installations before the District will permit connection to its water system.

**7. Backflow Prevention Assemblies.** Only backflow prevention assemblies approved by the District shall be permitted for installation on a Customer's water service. A list of approved backflow prevention assemblies will be provided by the District upon request to any affected Customer. Backflow prevention assemblies shall be installed in the manner prescribed in section 7603 of Title 17 of the Code of California Regulations and any District ordinance, resolution, rule, regulation, policy, plan or specification. The assembly shall be located as close as practical to the Customer's point of connection to the District water system. The District shall have the sole and final authority in determining the required location of a backflow prevention assembly.

**8. Fire Protection.** Residential fire sprinkler systems currently protected with a minimum of a double check valve will be allowed to continue in service until such system is modified, updated or the valve is found to be defective. Any new residential fire sprinkler system or unprotected system shall, at a minimum, be protected by a RP.

Commercial fire sprinkler systems currently protected with a minimum of a single detector check valve will be allowed to continue in service until such system is modified, updated or if the valve is found to be defective. Any new commercial fire sprinkler system or unprotected system shall, as a minimum, be protected by a RP.

**9. Testing.** All approved backflow prevention assemblies shall be tested immediately after installation and annually thereafter to ensure proper operation. Existing backflow prevention assemblies are required to be tested and inspected by July 1<sup>st</sup> of each calendar year. All such testing will be conducted by a certified backflow control tester approved by the District. A list of approved backflow control testers will be provided to a Customer upon request. In cases where the District deems the potential risks of cross-connection to be significant, testing may be required at more frequent intervals. Test procedures shall be those currently recommended by the University of Southern California Foundation for Cross-Connection Control or by AWWA. Each Customer having an existing or new backflow control assembly installed on his or her Premises shall provide the District with a copy of the results of all tests conducted on that assembly within 10 days of receiving the results. Any backflow prevention assembly that fails during a test will be required to be repaired or replaced as outlined below and retested at the Customer's expense.

**10. Compliance and Termination.** If, after an initial cross-connection survey, the District determines that a Customer is required to install an approved backflow prevention assembly, the Customer shall have 60 calendar days to install and test the assembly and provide the District with the test results showing that the assembly is properly functioning and correctly installed. The District may in its sole and exclusive authority provide an extension of time for a Customer's compliance with the installation requirement. In determining whether to grant a time extension, the District may consider, among other factors, the degree of potential risk of contamination of the water supply from cross-connection, the reasons supporting the Customer's request for an extension, and the Customer's diligence in complying with the requirements of this ordinance.

In cases when a backflow prevention assembly fails during periodic testing, the Customer will be granted a maximum of 30 days to repair or replace the failed assembly. The District may require a Customer to perform immediate repairs or replacement of a failed backflow prevention assembly if the District deems the risk of potential contamination from cross-connection to be unacceptable. The District will not grant any extensions of time to repair or replace a failed backflow assembly.

In cases where a Customer fails to or refuses to complete the annual testing of their backflow prevention assembly by the July 1<sup>st</sup> deadline and/or repair or replace a failed backflow prevention assembly as required by the District, the District shall immediately terminate the Customer's connection to the District water system in the manner provided in the last paragraph of section 4 of this ordinance. Water service to the Customer's Premises will remain terminated

until corrective action has been taken. Once the existing backflow prevention assembly has been properly repaired or a new assembly installed, the Customer must contact a District-approved certified backflow control tester to have the device retested and provide the District with a copy of the test results. If the District deems that the repaired or newly installed assembly is properly installed and functioning, the District will permit the Customer to re-connect to the District water system upon payment of all fees and charges necessary to re-connect and re-commence water service to the Customer's Premises.

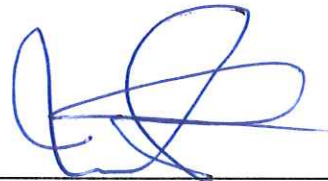
**11. Maintenance of Records.** The District shall maintain records of backflow prevention assembly type, size, manufacturer, installation date, location, test results and repairs for each assembly installed in the District. Such records will be retained in accordance with the District's records retention policy. The District shall maintain records of each installed assembly for the life of the assembly. Periodic test results shall be retained by the District for no less than three years in accordance with Title 17 of the California Code of Regulations.

**12. Effective Date.** This ordinance shall become effective 30 days from the date of adoption. Before the expiration of 15 days after its adoption, this ordinance shall be published in full in a newspaper of general circulation within the District and/or posted in three public places within the District.

PASSED AND ADOPTED by the Board of Directors of the Linden County Water District on the 14<sup>th</sup> day of August 2008, by the following vote:

AYES: - 4 -  
NOES: - 0 -  
ABSTAIN: - 0 -  
ABSENT: Kevin Stevens

By:



Michael Ostrom, President

ATTEST:



Barbara Kascht, Office Manager