

ORDINANCE NO. 327 N.S.

AN ORDINANCE ESTABLISHING PROVISIONS FOR
THE INSPECTION AND REGULATION OF
CROSS-CONNECTIONS TO PUBLIC
WATER SUPPLIES

The City Council of the City of El Paso de Robles does ordain that Chapter 14.18 to Title 14 is enacted as follows:

Chapter 14.18

CROSS-CONNECTIONS CONTROL AND INSPECTIONS

Sections:

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14.18.010 PURPOSE. The purpose of this article is (1) to protect the public water supply against actual or potential cross-connections by isolating within the premises contamination or pollution that 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 that are not approved as safe and potable for human consumption; (3) to eliminate cross-connections between drinking water systems and other sources of water or process water used for any purpose whatsoever which jeopardize the safety of the drinking water supply; (4) to prevent the making of cross-connections in the future;

potable for human use, an entirely separate drinking water system shall be installed to supply water at convenient points.

(2) Water systems for fighting fire, derived from a supply that cannot be approved as safe or potable for human use shall, whenever practicable, be kept wholly separate from drinking water pipelines and equipment. In cases where the domestic water system is used for both drinking and fire fighting purposes, approved backflow prevention devices shall be installed to protect such individual drinking water lines as are not used for fire fighting purposes. The users of such drinking water systems shall be further protected as prescribed by the State and County Health Departments.

(3) Potable water pipe lines connected to equipment for industrial processes or operations shall be disconnected therefrom if practicable. Where disconnection is not practicable, an approved backflow prevention device, the type or kind depending on the degree of hazard, shall be located in the feedline to the process piping or equipment, beyond the last point from which drinking water may be taken. In the event the particular processed liquid is especially corrosive or apt to prevent reliable action of the backflow prevention device, an air-gap separation shall be provided. These devices shall be repaired, overhauled or replaced whenever they are found to be defective. Records of tests, repairs, and replacement shall be kept and submitted to the Department.

(4) Sewage pumps and storm water pumps shall not have priming connections directly off any drinking water systems, unless the drinking water system is protected by an air-gap and no connection shall exist between the drinking water system and any other piping, equipment or tank in any sewage treatment plant, sewage pumping station, or storm water pumping station.

(5) Backflow protection by an approved backflow protection device operating under the reduced pressure principle shall be provided on each drinking outlet used for supplying ships or other vessels at piers or waterfronts. These devices must be located where they will prevent the return of water from any

ship or vessel into another adjacent ship or vessel or into the public water system.

(6) Where the premises contain dual or multiple water systems and piping, the exposed portions of pipelines shall be painted, banded or marked at sufficient intervals to distinguish clearly which water is safe for drinking and which is not safe. All outlets from other than approved water supply systems shall be posted as being unsafe for drinking purposes. All outlets intended for drinking purposes shall be plainly marked to indicate that fact.

14.18.090 Water Supervisor. At each premises where it is necessary, in the opinion of the Department, a Water Supervisor shall be designated.

14.18.100 Penalties for Non-Compliance. The water purveyor shall have the authority to immediately discontinue service to any premises where cross-connections or other hazards to the water system are found to exist, and shall not again render service to said premises until such conditions are eliminated in accordance with the Chapter. Any consumer who willfully violates any of the provisions of this Chapter or alters, or bypasses or renders inoperative any backflow prevention device installed under the provisions of this Chapter shall, in addition to immediate discontinuance of water service be subject to penalties prescribed in Title 14, Chapter 14.16.100 of the El Paso de Robles Municipal Code. Service shall not again be rendered until such violation or non-compliance has been corrected.

PASSED AND ADOPTED this 6th day of December, 1971, by the following roll call vote;

AYES: COUNCILMEN BARNHART, BLAKE, MINSHULL, NEBERMAN
AND MAYOR SCHWARTZ

NOES: NONE

ABSENT: NONE

ATTEST:

David P. [Signature]
City Clerk

Barney Schwartz
Mayor

(5) to encourage the exclusive use of public sources of water supply; (6) to protect the drinking water supply within the premises where plumbing defects or cross-connections may endanger the drinking water supply available on the premises. It is the intent of this article to recognize that there are varying degrees of hazard and to apply the principle that the degree of protection should be commensurate with the degree of hazard.

14.18.020 DEFINITIONS. For the purpose of this chapter, the following words and phrases are defined, and shall be construed as hereinafter set out, unless it shall be apparent from the context that they have a different meaning:

(1) **CROSS-CONNECTIONS:** The terms "cross-connection" or "cross-connected" as used in these regulations means any real or potential connection between any part of a public water system or other water system supplying potable water to members of the public and any auxiliary water supply or any source or system containing water or any substance that is not or cannot be approved as safe, wholesome, and potable for human consumption.

(2) **APPROVED WATER SUPPLY:** The term "approved water supply" means any water supply approved by, or under the supervision of a public health agency of the State of California, the County of San Luis Obispo or the City of El Paso de Robles.

(3) **AUXILIARY WATER SUPPLY:** The term "auxiliary water supply" means any water supply on or available to the premises other than the approved public potable water supply. These auxiliary waters may include, but not be limited to, water from another purveyor's public potable water supply or any natural source such as a well, spring, river, stream, harbor, etc., or "used water" or "industrial fluids".

(4) **APPROVED CHECK VALVE:** The term "approved check valve" means a check valve meeting the specifications and approval of a recognized, approved testing agency for backflow prevention devices.

(5) APPROVED DOUBLE CHECK VALVE ASSEMBLY: The term "approved double check valve assembly" means an assembly of at least two independently acting approved check valves including tightly closing shut-off valves on each side of the check valve assembly and suitable leak detector drains plus connections available for testing the water tightness of each valve. The entire assembly shall be made in the factory of the manufacturer and shall meet the specifications and approval of a recognized, approved testing agency for backflow prevention devices. To be approved, these devices must be readily accessible for maintenance testing.

(6) 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.

(7) APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE:

The term "approved reduced pressure principle backflow prevention device" means a device approved by a recognized and approved testing agency for backflow prevention devices. The entire assembly shall be made in the factory of the manufacturer and shall incorporate two or more check valves and an automatically differential relief valve located between the two checks, two shut-off valves, and equipped with necessary appurtenances for testing. The device shall operate to maintain the pressure in the zone between the two check valves less than the pressure on the public supply side of the device. At cessation of normal flow, the pressure between check valves shall be less than the supplied pressure. In case of leakage of either check valve, the differential relief valve shall operate to maintain this reduced pressure by discharging to the atmosphere. When the inlet pressure is two pounds per square inch or less, the relief valve shall open to the atmosphere, thereby providing an air-gap in the device. To be approved these

devices must be readily accessible for maintenance and testing and installed in a location where no part of the valve will be submerged.

(8) CONTAMINATION: The term "contamination" means an impairment of the quality of the water to a degree which creates an actual hazard to the public health through poisoning or through the spread of disease.

(9) POLLUTION: The term "pollution" means an impairment of the quality of the water to a degree which does not create an actual hazard to the public health but which does adversely affect such waters for domestic use.

(10) HEALTH HAZARD: The term "health hazard" means an actual or potential threat of contamination of a physical or toxic nature to the public potable water system to such a degree of intensity that there would be a danger to health.

(11) DEPARTMENT: The term "department" means the Health Department of the County of San Luis Obispo.

(12) PLUMBING HAZARD: The term "plumbing hazard" shall mean a plumbing type cross-connection in a consumer's potable water system that has not been properly protected by a vacuum breaker, air-gap separation or other device. The term "plumbing hazard" includes but is not limited to cross-connections to toilets, sinks, lavatories, wash trays, domestic washing machines and lawn sprinkling systems.

(13) POLLUTION HAZARD: The term "pollution hazard" means an actual or potential threat to the physical properties of the public water system or the potability of the public water supply, but which would not constitute a health or system hazard, as defined.

(14) SYSTEM HAZARD: The term "system hazard" shall mean an actual or potential threat of severe damage to the physical properties of the public potable water system.

(15) SERVICE CONNECTION: The term "service connection" shall mean the terminal end of a service connection from the public

potable water system, i.e., where the water purveyor loses jurisdiction and sanitary control over the water at its point of delivery to the consumer's water system. If a meter is installed, then the service connection shall mean the down-stream end of the meter. There should be no unprotected take-offs from the service line ahead of any meter or back-flow prevention device located at the point of delivery to the consumer's water system.

(16) PURVEYOR: The term "purveyor" shall mean any person, corporation, public utility, municipality, district or other agency or institution furnishing or supplying water for domestic purposes.

(17) WATER SUPERVISOR: The term "water supervisor" means the consumer or a person on the premises appointed by the consumer who is charged by the consumer with the responsibility to the consumer of maintaining the consumer's water system free from cross-connections and other sanitary defects, as required by regulations and laws. A certified back-flow prevention device tester may not act as a water supervisor unless he is a full-time employee of the consumer, and has the day-to-day responsibility for the installation and use of pipelines and equipment on the premises and for the avoidance of cross-connections.

(18) INDUSTRIAL FLUIDS: The term "industrial fluids" shall mean any fluid or solution which may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutional or plumbing hazard if introduced into the water supply. This may include, but not be limited to polluted or contaminated used waters; all types of processed waters and "used waters" originating from the public potable water system which may deteriorate in sanitary quality; chemicals in fluid form; acids and alkalis; circulating cooling waters connected to an open cooling tower and/or cooling waters that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters such as from wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, etc; oil; gases; glycerine; paraffines; caustic and acid solutions; and other liquid and gaseous fluids used in industrial or other processes or for firefighting purposes.

(19) CONSUMER: The term "consumer" shall mean the owner of a premises having a service from a potable water system.

14.18.025 Consumer Responsibility. Consumers shall be responsible for the installation and use of pipelines and equipment for the avoidance of cross-connections, compliance with the provisions of this Chapter, and for reporting to the Department any changes in water usage. In the event of any cross-connections existing or occurring on or within the premises, the Department shall be immediately notified by the consumer so that appropriate corrective measures may be taken.

14.18.030 Where Protection is Required.

(1) Each service connection from the public 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.

(2) Each service connection from the public water system for supplying water to premises on which any substance is or may be handled in such a fashion as to permit entry into the water system shall be protected against backflow of the substance from the premises into the public system. This shall include the handling of processed waters, and waters originating from the public water supply system which have been subject to the deterioration in sanitary quality.

(3) Backflow prevention devices shall be installed on the service connection to any premises that have cross-connections. It shall be the responsibility of the consumer to provide, test, and maintain protective devices as required.

14.18.040 Type of Protection. The protective device required shall depend on the degree of hazard. In determining the degree of hazard and the type of back-flow prevention to be required, the following criteria shall be used.

(1) An air-gap separation shall be used where there is a health hazard. The air-gap shall be located as close as practicable to

the meter and all piping between the meter and the receiving tank shall be entirely visible. If these conditions cannot reasonably be met, the public water supply shall be protected with an approved reduced pressure backflow device, providing the alternative is acceptable to the Department.

(2) An air-gap separation or a reduced pressure principle backflow prevention device shall be used where there is a system hazard or a plumbing hazard or any combination of the above. If an air-gap separation is used, the air-gap shall be located as close as practicable to the meter and all piping shall be clearly visible. Where there is no meter the protective device shall be located on the service connection pipeline at a point on the consumer's property nearest the public water supply pipeline.

(3) In all other cases of cross-connection, there shall be required a double check valve assembly.

(4) Notwithstanding any other provisions of this Section, at the service connection to any sewage plant, sewage pumping station, or storm water pumping station, the public water supply shall be protected by an air-gap separation. The air-gap shall be located as close as practicable to the meter and all piping between the meter and receiving tank shall be entirely visible. If these conditions cannot be reasonably met, the public water supply shall be protected with an approved reduced pressure principle backflow prevention device, providing this alternative is acceptable to the Department. Final decision in this matter shall rest with the State Department of Public Health.

(5) Notwithstanding any other provisions of this Section, on any premises where the County Health Department determines that a special hazard exists, the public water supply shall be protected by such approved backflow prevention devices as designated by the Department.

8.30.050 Frequency of Inspection of Protective Devices. It shall be the duty of the consumer on any premises on which backflow protective devices are installed to have competent inspections made at least once a year or more often in those instances where successive inspection indicate defective operation. These devices shall be repaired, overhauled or replaced at the expense of the water user whenever they are found to be defective. Records of such tests, repairs, and overhaul shall be kept and submitted to the Department.

14.18.060 Qualification and Certification of Person to Inspect and Maintain Backflow Prevention Devices.

(1) No person shall be qualified to inspect and maintain backflow prevention devices unless his qualifications have been established to the satisfaction of the Department as hereinafter required. To determine the qualifications of any person to inspect and maintain backflow prevention devices, the Department shall have the authority to conduct examinations as necessary. Upon successful completion of such examination and such training as the Department shall prescribe, the person so examined shall receive from the Department a "Certificate of Competence". Any limitations or conditions imposed by the Department on the examinee in the inspection and maintenance of backflow prevention devices shall be stated upon the face of said Certificate issued to the examinee. The Department shall make available to consumers a list of persons qualified to inspect and maintain backflow prevention devices. Every person after receiving a "Certificate of Competence" from the Department, shall be issued such identification as the Department shall deem appropriate; and such identification shall be kept in the immediate possession of every person holding a Certificate of Competence while said person is inspecting or maintaining any backflow prevention device in the City of El Paso de Robles.

(2) Every person desiring to qualify to inspect or maintain backflow prevention devices shall make application to the Department. At the time of making application, every person

shall pay a fee of Ten Dollars (\$10.00), which fee shall not be refundable. Said fee shall cover the expenses of the Department in processing the applications, Certificates of Competence, and any documents of identification required by the Department.

(3) Every person holding a Certificate of Competence issued by the Department under the provisions of this Article shall be required to renew said Certificate every three (3) years. The requirements for re-examination may be waived at the discretion of the Department.

(4) Every person receiving a Certificate of Competence under the provisions of this Article shall be responsible for the competency and accuracy of all inspections and maintenance performed by him on any backflow prevention device.

(5) Any person issued a Certificate of Competence who violates or fails to comply with any of the provisions of this Article or willingly falsifies inspection or maintenance reports submitted to the Department shall, in addition to the penalties prescribed in Title 14, Chapter 14.16.100 of the City of El Paso de Robles Municipal Code, have said Certificate immediately revoked, and shall not be considered for recertification for a period of two (2) years.

14.18.070 Booster Pump - Regulation Of. When it becomes necessary, because of low pressure or special operating conditions, to install a booster pump on the service of any premises, such pump shall be equipped with a low pressure cutoff switch designed to shut off the pump when the pressure on the inlet side is 25 P.S.I.G. or lower. It shall be the duty of the consumer to maintain the cut-off device in proper working order, and to certify to the Department at least once a year that the device is operable.

14.18.080 Protection of Water System Within Premises.

(1) Whenever the Department determines that drinking water systems on a premise cannot be protected against entry of water from any piping system, equipment or other source not safe or