

ORDINANCE NO. 1330

AN ORDINANCE OF THE CITY OF REDLANDS ADOPTING AND PRESCRIBING
THE RULES AND REGULATIONS RELATING TO CROSS-CONNECTIONS AND
BACKFLOW PREVENTION

THE CITY COUNCIL OF THE CITY OF REDLANDS DOES ORDAIN AS FOLLOWS:

Section One: The purpose of these regulations 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.

These regulations are in accordance with the State of California Department of Public Health Administrative Code, Title 17 entitled "Regulations Relating to Cross-Connections."

It is the intent of these regulations 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.

Section Two: Definitions.

A. Cross-Connections. The term "cross-connection" as used in these regulations means any unprotected connection between any part of a water system used or intended to supply water for drinking purposes and any source or system containing water or substance that is not or cannot be approved as safe, wholesome, and potable for human consumption.

B. Approved Water Supply. The term "approved water supply" means any water supply approved by or under the public health supervision of, a public health agency of the State of California, or its political subdivisions. In determining what constitutes an approved water supply, the State Department of Public Health reserves final judgment as to its safety and potability.

C. Auxiliary Supply. The term "auxiliary supply" means any water supply on or available to the premises other than the public water supply.

D. City. The word "City" as used in this ordinance means the cross-connection Control Board of the City of Redlands which is herein established and shall consist of the City Manager, the Director of Public Works and the Water Superintendent and Engineer.

E. Approved Check Valve. The term "approved check valve" means a check valve that seats readily and completely and has been previously approved for use in this service by the City. It must be carefully machined to have free moving parts and assured watertightness. The face of the closure element and valve seat must be bronze, composition, or other non-corrodible material which will seat tightly under all prevailing conditions of field use. Pins and bushings shall be of bronze or other non-corrodible, non-sticking material, machined for easy, dependable operation. The closure element (e.g., clapper) shall be internally weighted or otherwise internally equipped to promote rapid and positive closure in all sizes where this feature is obtainable.

F. Approved Double Check Valve Assembly. The term "approved double check valve assembly" means an assembly which has previously been approved for use in this service by the City and consists 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 watertightness of each check valve.

G. 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.

H. Approved Reduced Pressure Principle Backflow Prevention Device. The term "approved reduced pressure principle backflow prevention device" means a device which has previously been approved for use in this service by the City and consists of incorporating two or more check valves and an automatically operating differential relief valve located between the two checks, two shutoff 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 water supply side of the device.

At cessation of normal flow, the pressure between check valves shall be less than the supply 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.

Section Three. Where Protection is Required:

(1) Each service connection from the City 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 water purveyor, and is approved by the public health agency having jurisdiction.

(2) Each service connection from the City water system for supplying water to premises on which any substance is handled in such a fashion as to permit 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 waters originating from the City water supply system which have been subject to deterioration in sanitary quality.

(3) Backflow prevention devices shall be installed on the service connection to any premises that have internal cross-connections unless such cross-connections are abated to the satisfaction of the City and approved by the State or local health department.

Section Four. Type of Protection. The protective device required shall depend on the degree of hazard as tabulated below:

(1) At the service connection to any premises where there is an auxiliary water supply handled in a separate piping system with no known cross-connection, the City water supply shall be protected by an approved double check valve assembly.

(2) At the service connection to any premises on which a substance that would be objectionable (but not necessarily hazardous to health), if introduced into the public water supply, is handled so as to constitute a cross-connection, the City water supply shall be protected by an approved double check valve assembly.

(3) At the service connection on any premises on which there is an auxiliary water supply where cross-connections are known to exist which cannot be presently eliminated, the public water supply system shall be protected by an approved reduced pressure principle backflow prevention device. A double check valve assembly may be used in lieu of such device if local experience indicates that double check valves are reliably operated and if approved by the water purveyor and local health agency.

(4) At the service connection to any premises on which any material dangerous to health or toxic substance in toxic concentration is or may be handled, the public water supply shall be protected by an air-gap separation. The air-gap shall be located as close as practicable to the service cock and all piping between the service cock and receiving tank shall be entirely visible. If these conditions cannot reasonably be met, the public water supply shall be protected with either an approved reduced pressure principle backflow prevention device, or an approved double check valve assembly, providing the alternative is acceptable to both the water purveyor and the local health agency.

(5) At the service connection to any sewage treatment plant or sewage pumping station the City water supply shall be protected by an air-gap separation. The air-gap shall be located as close as practicable to

the service cock and all piping between the service cock 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 both the water purveyor and local health agency. Final decision in this matter shall rest with the State Department of Public Health.

Section Five. Responsibilities.

A. It shall be the responsibility of the City to make the determination if any service connection or the handling of substances within the premises served is deemed to constitute a hazard to the City water system and to determine the degree of hazard and establish the requirements for protection. The City shall accomplish this in conjunction with the local health agency.

B. It shall be the responsibility of the user of the water to install and maintain the required protective device as specified by the City and to have the device inspected and tested periodically by a person approved as qualified by the City. Inspection intervals shall be one year maximum. Required interval may be less if determined by the City that a history of malfunctioning has been established or if the degree of hazard makes more frequent inspections advisable. All devices shall be disassembled for maintenance and repair at least every five years. All test results and all maintenance steps taken shall be reported regularly in forms to be provided by the City and maintained on file at the City offices. Failure to file with the City the required test and maintenance reports will require the City to consider the connection unprotected and service may be discontinued.

Section Six. Discontinuance of Service.

Service of water to any premises may be discontinued by the Water Division after reasonable notification if unprotected cross-connections exist on the premises, or if any defect is found in an installed backflow preventive device, or if a backflow preventive device has been removed or by-passed, and service will not be restored until such conditions or defects are corrected.

Discontinuance of service may be summary, immediate and without notice whenever, in the judgment of the Water Superintendent of the Water Division, such action is necessary to protect the purity of the water supply or the safety of the water system, and the Water Superintendent's determination shall be final and conclusive.

Section Seven. Right of Entry.

The City representative assigned to inspect premises relative to possible hazards shall carry proper credentials of his office, upon exhibition

of which he shall have the right of entry, during usual business hours, to inspect any and all buildings and premises in the performance of his duty. This right of entry shall be a condition of water service in order to provide assurance that the continuation of service to the premises will not constitute a menace to the health, safety and welfare of the people throughout the City's water system.

Section Eight: Each provision of this ordinance shall be separate and severable and in the event any specific provision is declared void or invalid, no other section, otherwise legal and valid, shall be affected thereby.

Section Nine: This ordinance shall be in force and effect as provided by law.

Section Ten: The City Clerk shall certify to the passage of this ordinance and shall cause the same to be published once in the Redlands Daily Facts, a newspaper hereby designated for that purpose.

ATTEST:

s/ Waldo F. Burroughs
Mayor of the City of Redlands

Peggy A. Moseley
City Clerk

APPROVED FOR FORM:

s/ Edward F. Taylor
City Attorney

I, Peggy A. Moseley, City Clerk, City of Redlands, hereby certify that the foregoing ordinance was duly adopted by the City Council at a regular meeting thereof held on the 7th day of February, 1967, by the following vote:

AYES: Councilmen Martinez, Hartzell, Cummings, DeMirjyn, Mayor Burroughs
NOES: None
ABSENT: None

Peggy A. Moseley
City Clerk