CITY OF HEALDSBURG

ORDINANCE NO. 976

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF HEALDSBURG REPEALING ORDINANCE 798 AND ESTABLISHING A NEW CROSS-CONNECTION CONTROL PROGRAM TO PROTECT THE PUBLIC WATER SYSTEM

The City Council of the City of Healdsburg does ordain as follows:

Section 1. Article III, Water System, Sections 15-33, 15- 34, 15-34.1, 15-35, 15-36, 15-37, 15-38 and 15-38.1 of Chapter 15, "Public Utilities", of the City Municipal Code are hereby repealed.

Section 2. New Sections 15-33, 15-34, 15-35, 15-36, 15-37, 15-38, 15-38.1, 15-38.2, 15-38.3, 15-38.4, 15-38.5, 15-38.6, 15-38.7, 15.38.8 and 15-38.9 of Article III, Chapter 15 are hereby enacted to read as follows:

CROSS-CONNECTION CONTROL

Section 15-33. Purpose:

Under Public Law 99-339 the Federal Safe Drinking Water Act Amendments of 1986 and the California Code of Regulations, Title 17, the City has the primary responsibility for preventing water from unapproved sources, or any other substances, from entering the public potable water system. In addition, to protect the users of the City water system, the City shall require that any unprotected cross-connection be eliminated or that the water system be protected with an approved backflow prevention assembly at the point of use.

The purpose of this Ordinance is:

1. To protect the public water system against potential or actual contamination by isolating from the City water system, any potential contaminant or pollution that could occur on a private premises due to an unknown, undiscovered, unauthorized, and/or potential cross-connection on the premises;

2. To eliminate cross-connections between drinking water systems and other sources of water, process water, or other liquids used for any purpose whatsoever which may jeopardize the safety of the City water supply;

3. To prevent future unauthorized cross-connections;

4. To provide for the continuing maintenance of backflow prevention assemblies.

The regulations described herein are adopted in accordance with the California Code of Regulations, Title 17. These regulations supplement and do not supercede City plumbing regulations, codes or ordinances or State Department of Health Services regulations relating to water supply. It is the responsibility of all persons, property owners and/or tenants to abide by this Ordinance as a condition of water service from the City of Healdsburg.

Section 15-34. Interpretation:

In interpreting and applying the provisions and requirements of this Ordinance, such provisions shall be held to be the minimum requirements. Where the ordinance imposes a greater restriction than is imposed or required by other laws, rules, regulations or standards, of or applicable to the City, the provisions of this Ordinance shall control and be applied; where such other laws, rules, regulations or standards are more restrictive, they shall control and be applied.

Section 15-35. Responsibility and Scope:

The City shall protect the public water supply from contamination by implementation of a Cross-Connection Control Program. The City's Cross-Connection Control Program shall for the purpose of addressing the requirements of Title 17, Sections 7583 through 7605 include, but not be limited to, the following elements:

(a) The adoption of operating rules or ordinances to implement the cross-connection program,

(b) Surveys to identify premises where cross-connections are likely to occur,

(c) The provisions of backflow protection at the user's connection or within the user's premises or both,

(d) The designation of at least one person trained in cross-connection control to carry out the cross-connection program,

(e) The establishment of a procedure or system for testing backflow prevention assemblies, and

(f) The maintenance of records, locations, tests and repairs of backflow prevention assemblies.

Section 15-36. Definitions:

For the purposes of this Ordinance, the following definitions shall apply unless the context clearly indicates or requires a different meaning. If a word or term used in this Ordinance is not contained in the following list, its definition, or other technical term used, shall have the meanings or definitions listed in the most recent edition of the *Manual of Cross Connection Control* published by the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California (USC Manual).

(a) "Air-Gap Separation" (Air Gap) means a vertical, physical separation between the free flowing discharge end of the potable water supply line and the overflow rim of a non-pressure receiving vessel. The separation must be at least twice the inside diameter of the supply line, but never less than one inch.

(b) "Approved Backflow Prevention Assembly" (also "Backflow Assembly" or "Assembly") means an assembly to counteract backpressures or prevent back-siphonage. In order to be considered approved, an assembly including isolation valves and test cocks must be currently on the list of approved backflow prevention assemblies issued by USC Foundation for Cross Connection Control and Hydraulic Research.

(c) "Auxiliary Water System or Supply" means any water source or system other than the City of Healdsburg water system that may be available to premises served by the City water system.

(d) "Approved Auxiliary Water System or Supply" means any water system or supply not owned and operated by the City of Healdsburg, which has been inspected and approved by the Sonoma County Health Department or other public health authority, meets State and potable water quality regulations, and is acceptable to the City of Healdsburg.

(e) "Backflow" means the flow of water or other liquids, mixtures or substances from the customer's system into the City water system.

(f) "Backpressure" means any elevation of pressure in the downstream piping system (by pump, elevation of piping, or steam and/or air pressure) above the supply pressure at the point of consideration that would cause, or tend to cause, a reversal of the normal direction of flow.

(g) "Back-siphonage" means the flow of water or other liquids, mixtures or substances from the customer's system into the City water system caused by a reduction or loss of pressure within the City water system.

(h) "City" shall mean the City of Healdsburg.

(i) "City Engineer" means Public Works Director or City Engineer of the City of Healdsburg.

(j) "City water system" means the water distribution system owned and operated by the City, including the service connection to a water main.

(k) "Contamination" means the entry into or presence into a water system or supply of any substance, which may be deleterious to health and/or the quality of the water.

(l) "Cross-connection" means any unprotected actual or potential connection or structural arrangement between the potable water system and any other source or system through which it is possible to introduce into any part of the potable system any used water, industrial fluid, gas, or substance other than the intended potable water with which the system is supplied.

(m) "Customer" means any person or organization that receives water or water service from the City.

(n) "Customer system" means the water piping system located downstream from the City water meter. This is the point where the City loses jurisdiction and the sanitary control over the water delivered to the customer.

(o) "Degree of Hazard" means a qualitative rating and classification of hazard that may be attached to all actual or potential cross-connections.

(p) "Double Check Detector Assembly" or "DCDA" shall mean an approved assembly consisting of two (2) approved double check valve assemblies, set in parallel, equipped with a meter on the bypass line to detect small amounts of water leakage or use.

(q) "Double Check Valve Backflow Prevention Assembly" (also "double check assembly", "double check" "DC Assembly" or "DC") shall mean an approved assembly to counteract backpressures or prevent back-siphonage which consists of two (2) independently-operating, spring loaded or weighted check valves, and shall include a shut-off valve on each side of the check valves and test cocks to test the check valves for tightness.

(r) "High Hazard or Health Hazard or System Hazard" means the classification assigned to a high level of hazard represented by a cross-connection that could allow a substance that may cause illness or death from backflow into the potable water supply, or cause the introduction of any contaminant to the City water system.

(s) "Mobile Units" means any non-fixed business or operation, which may have the potential to introduce contaminants into the City water system from a mobile source.

(t) "Non-residential use" shall include all uses not specifically included in "residential uses" as defined in this Section.

(u) "Plumbing Code" shall mean the 1998 or current version of the California Plumbing Code adopted for use by the City Council of the City of Healdsburg.

(v) "Pollutional Hazard" means the classification assigned to a moderate level of hazard represented by a cross connection that could allow a substance that may be objectionable, but not hazardous to human health, to backflow into the City of Healdsburg water system.

(w) "Premises" means any piece of property, customer, or service to which City of Healdsburg water is provided, including, but not limited to, all improvements, mobile structures, and structures located thereon.

(x) "Recognized Tester" means an individual with a current, approved City of Healdsburg application as a tester of backflow prevention assemblies meeting all the requirements of the City as may be adopted from time to time by resolution of the City Council.

(y) "Reduced Pressure Detector Check Assembly" or "RPDC" shall mean an assembly to counteract backpressures or prevent back-siphonage, consisting of two approved reduced pressure backflow assemblies, set in parallel, equipped with a meter on the bypass line to detect small amounts of water leakage or use.

(z) "Reduced Pressure Principle Backflow Prevention Assembly" (also "Reduced Pressure Principle Assembly", "RP Assembly" or "RP") shall mean an assembly to counteract backpressures or prevent back-siphonage, containing two independently-acting approved check valves together with a hydraulically-operated, mechanically-independent pressure differential relief valve. The relief valve is located between the check valves, below the first check valve. The assembly includes properly located test cocks and tightly closing shut-off valves at each end of the assembly.

(aa) "Residential Use" shall include single family dwellings, duplexes, multiplex housing and apartments not used for commercial purposes and individual parcels where two or more units are served by one water meter.

(bb) "Thermal Expansion" refers to the expansion in volume that occurs when water is heated.

Section 15-37. Evaluation of Hazard:

As a condition of obtaining water service, the customer shall cooperate in the City's evaluation of the degree of potential hazard to the public water supply, which may be created as a result of conditions existing on a customer's premises. At a minimum, the City shall consider: the existence of cross-connections, the nature of materials handled on the property, the degree of potential for a backflow occurring, the degree of piping system complexity and the potential for piping system modification which could potentially increase the risk of cross-connection. Special consideration shall be given to the following premises:

(a) Premises where substances that could be harmful to health are handled under pressure in a manner, which could permit their entry into the public water system. This shall include chemical or biological process waters, and water from public water supplies, which have deteriorated in sanitary quality.

(b) Premises having an auxiliary water supply, unless the auxiliary supply is an Approved Auxiliary Water Supply System.

(c) Premises that have internal cross-connections that are not abated to the satisfaction of the City.

(d) Premises where cross-connections are likely to occur and entry by the City is restricted such that the City cannot inspect for cross-connections with sufficient detail or frequency or at sufficiently short notice to assure that cross-connections do not exist.

(e) Premises having a history of cross-connections being established or re-established.

Section 15-38. Type of Protection Required:

The City is hereby authorized to require a type of backflow protection that is commensurate with the degree of hazard that exists on the customer's premises. The type of protection that may be required (listed in an increasing level of protection) includes: Double Check Valve Assembly, Reduced Pressure Principle Backflow Assembly, and an Air-Gap Separation. The customer may choose a higher level of protection than required by the City. The minimum types of backflow protection required at

the customer's connection to premises of various types are given in Table 1, attached hereto and incorporated herein by reference. Premises not included or not specifically covered in Table 1, shall be evaluated on a case-by-case basis. In such cases, the appropriate backflow protection shall be determined by the City Engineer.

Section 15-38.1 Location of Backflow Prevention Assemblies:

(a) Air-gap Separation: Shall be located at the location of the potential hazard and plumbed as required by the City Engineer to adequately protect the City water system. All piping between the hazard and the air gap shall be entirely visible unless otherwise approved in writing by the City Engineer.

(b) Double Check Valve Assembly: Shall be located as close as practical to the customer's connection and shall be installed above grade, if possible, and in a manner where it is readily accessible for testing and maintenance.

(c) Reduced Pressure Principle Backflow Prevention Assembly: Shall be located as close as practical to the customer's connection and shall be installed a minimum of twelve inches (12) above grade with a minimum of twelve inches (12) side clearance. The assembly shall also not be located more than thirty-six inches (36) above grade as measured from the bottom of the assembly.

Section 15-38.2 Approval of Backflow Prevention Assemblies:

Backflow prevention assemblies used to comply with this Ordinance shall have passed laboratory and field evaluation tests as outlined by the University of Southern California, Foundation for Cross Connection Control and Hydraulic Research.

Section 15-38.3 Installation of Backflow Prevention Assemblies:

(a) A. New Service Connections:

(1) At the time of application for water service by a potential customer, the City Engineer will review the application to determine the type of protection required. If the City Engineer determines that a backflow prevention assembly or air-gap is required, it shall be the customer's responsibility at customer's expense to install an approved backflow prevention assembly or air-gap in accordance with City standards and at a location approved by the City Engineer.

(2) Installation of a backflow prevention assembly or air-gap, where required by the City, shall be a condition of City water service and meter installation.

(b) Existing Service Connections Without Backflow Prevention Assemblies or Air-Gaps: The City may inspect the premises of existing customers, which, in the opinion of the City Engineer may require backflow prevention. If the City Engineer determines that backflow prevention is required, the installation of the appropriate assembly shall be a condition of continued water service from the City water system to the premises and/or customer.

(c) Upgrading of Existing Backflow Prevention Assemblies or Air-Gaps. An existing backflow prevention assembly or air-gap which, in the opinion of the City Engineer, is an unapproved assembly or air-gap, or does not provide adequate protection for the degree of potential hazard from the backflow or back-siphonage from a premises and/or customer's system, shall be upgraded at the customer's expense.

(d) Penalty for Failure to Install or Upgrade Assembly Within Specified Period. Failure of a customer to provide for the installation or the upgrading of a required backflow prevention assembly or air-gap shall result in termination of City water service to the premises and/or customer's system until the customer has installed or upgraded and tested an approved assembly or air-gap to the satisfaction of the City Engineer.

(e) Ownership of Backflow Prevention Assemblies and Air-Gaps. Backflow prevention assemblies and air-gaps installed or upgraded shall be and remain the property of the customer.

Section 15-38.4 Testing and Maintenance:

(a) The City shall notify the customer when testing of backflow prevention assemblies is required. The notice shall include the date when the test shall be completed and the address where all results are to be submitted to the City Engineer. The testing, maintenance, repair and replacement of these assemblies are the responsibility of the customer.

(b) Backflow prevention assemblies shall be tested at least annually or more frequently if the City determines that it is necessary. Assemblies found to be defective, shall be repaired or replaced in accordance with the USC Foundation for Cross Connection Control and Hydraulic Research.

(c) Assemblies shall be tested only by those persons who have been certified by the AWWA and the USC Foundation for Cross Connection Control and Hydraulic Research and are listed on the City's Recognized Tester List.

(d) Backflow prevention assemblies shall be tested immediately after they are installed, relocated or repaired. Backflow prevention assemblies shall not be placed in service until such time as they have passed the required testing procedures.

(e) The City shall maintain reports of testing and maintenance for a minimum of three years.

Section 15-38.5 City's Right To Enter Private Property:

As a condition of water service for new customers and as a condition of continued water service for existing customers, customers may be required to install, maintain and test backflow prevention assemblies or air-gaps. The customer shall permit the City to enter upon the customer's property during the City's normal working hours, or during an emergency to test and inspect the customer's backflow prevention assembly or air-gap device.

Section 15-38.6 Promulgation and Enforcement of the Cross-Connection Control Program

The City Engineer shall from time to time recommend and the City Council shall from time to time promulgate by resolution, such policies, standards and requirements which explain and or provide detailed information and technical specifications with respect to this Ordinance, as may be necessary and proper in connection with the regulation, installation, maintenance, and testing of any water facilities and services installed, operated or maintained pursuant to, and in conformity with, this Ordinance and the Municipal Code of the City of Healdsburg. It shall be the responsibility of all customers and all other persons coming within the purview of this Ordinance to comply with such policies, standards and requirements as a condition of water service.

Section 15-38.7 Schedule of Monthly Charges and Special Services

The City Council shall fix, by resolution, the monthly service fee to be charged for the administration of the Cross-Connection Control Program and such special service charges that are necessary for the enforcement of this division. Service fees and charges shall be fixed and revised from time to time with the objective that the program be economically self-sustaining, unsubsidized by revenues generated by monthly charges and rates for water service.

Section 15-38.8 Termination of Water Service:

The City may terminate the customer's water service under any of the following circumstances:

(a) The City Engineer determines that a high-hazard cross-connection exists on premises which represents an immediate threat to the City water system.

(b) The customer has refused to allow City representatives to enter the property for the purposes of inspecting the customer's plumbing system, and in the opinion of the City Engineer, a serious potential backflow hazard may exist on the property.

(c) The customer fails to install, test, repair, or certify a backflow prevention assembly or air-gap within the time period established by resolution of the City Council. Such service shall be restored only when the customer has installed, inspected, tested repaired, and/or certified an approved assembly or air-gap as required by the City.

(d) The customer has refused to allow City representatives to enter the property for the purposes of testing and inspecting the customer's backflow prevention assembly or air-gap device.

(e) The City discovers any defect in the customer's backflow installation or other protective devices, and in the opinion of the City Engineer, such defect represents a serious and immediate threat to the City water system. Such service shall not be restored until the defect has been corrected to the satisfaction of the City Engineer.

Section 15-38.9 Violation:

The City may enforce any provision of this Ordinance through criminal proceedings prosecuted by the City Attorney, or through any other method or procedure authorized by law.

Section 3: If any section, subsection, sentence, clause phrase or word of this Ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction or preempted by state legislation, such decision or legislation shall not affect the validity of the remaining portions of this Ordinance. The City Council of the City of Healdsburg hereby declares that it would have passed this Ordinance and each and every section, subsection, sentence, clause or phrase not declared invalid or unconstitutional without regard to any such decision or preemptive legislation.

Section 4: This ordinance of the City of Healdsburg shall be effective thirty (30) days after the date of its passage. Before expiration of fifteen (15) days after its passage, this ordinance or a summary thereof as provided in California Government Code Section 36933, shall be published at least once in a newspaper of general circulation published and circulated in the City of Healdsburg, along with the names of the members of the City Council voting for and against its passage.

INTRODUCED by the City Council of the City of Healdsburg on the 21st day of May, 2001, and PASSED and APPROVED on the 4th day of June, 2001, by the following vote:

AYES:	Councilmembers:	(5)	Gleason, Gold, Mitchell, Schaffner and Mayor Liles
NOES:	Councilmembers:	(0)	None
ABSENT:	Councilmembers:	(0)	None
ABSTAINING:	Councilmembers:	(0)	None

SO ORDERED: ATTEST:

_____ _____

Jason Liles, Mayor Maria Curiel, City Clerk

TABLE 1

APPLICATION	TYPE OF ASSEMBLY
Auto Body/Auto Painting Shops	Reduced Pressure
Auto/Truck Repair Shops	Reduced Pressure
Auxiliary Water Supply	Double Check/Reduced Pressure
Beauty Parlor or Barber Shop with commercial sink	Reduced Pressure
Blood Banks	Reduced Pressure
Boiler Systems (any)	Reduced Pressure
Buildings with sewage pumps	Reduced Pressure
Cement, Concrete, Sand & Gravel Plants	Reduced Pressure
Car Wash	Reduced Pressure
Dairy or Cold Storage	Reduced Pressure
Facilities with chemical storage or processing	Reduced Pressure
Film Processing	Reduced Pressure
Fire Systems- Multi Family Residential/Commercial/Industrial	Double Check Detector Check
Fire Systems – Single Family Residential	None Required
Fire Systems- with chemical additives	Reduced Pressure Detector Check
Gas Stations	Reduced Pressure
Heating & Air Conditioning with direct plumbing	Reduced Pressure
Hospital, Medical or Dental Facility, Convalescent or Long Term Care Facility	Reduced Pressure
Irrigation System (non single family residential)	Reduced Pressure
Laboratories (commercial or research)	Reduced Pressure
Laundry or Dry Cleaner	Reduced Pressure
Mortuary	Reduced Pressure
Ornamental Pools, Ponds, or Fountains with direct plumbing	Reduced Pressure/Air Gap
Premises with 3 or more stories	Double Check
Printing Shops	Reduced Pressure
Properties with multiple service connections	Double Check
Radioactive Materials	Reduced Pressure
Restaurant or Commercial Kitchen with hard-plumbed dishwashing/beverage fountain or commercial sink, Pub, Bar or Cocktail Lounge	Double Check
Sewage or Storm Drain Pumping Facilities with direct plumbing	Air Gap
Soft Water Tanks that backwash	Reduced Pressure
Steam Cleaning Equipment (any type)	Reduced Pressure
Non Single Family Residential Swimming Pools	Double Check
Tank Trucks or Chemical Spray Rigs	Reduced Pressure
Veterinary Clinics	Reduced Pressure
Water Service with booster systems	Double Check
Winery or Brewery	Reduced Pressure