

RESOLUTION NO. 1016

A RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE TOWN OF PAYSON, ARIZONA, ADDING SECTION 13-4-3 TO ARTICLE 13 OF THE CODE OF THE TOWN OF PAYSON AND ESTABLISHING RULES AND REGULATIONS FOR CROSS-CONNECTION CONTROL.

THE MAYOR AND COMMON COUNCIL OF THE TOWN OF PAYSON, ARIZONA DO HEREBY RESOLVE AS FOLLOWS:

SECTION 13-4-3 CROSS CONNECTION CONTROL

A. That in order to protect the public water supply of the Town of Payson from the possibility of contamination or pollution by isolating within the user's system such contaminants or pollutants which could backflow into the public water supply; and to provide for the monitoring and enforcement of a continuing program of backflow prevention, which will prevent the contamination or pollution of Payson's potable water supply the following rules, regulation and guidelines shall be and are hereby adopted and shall henceforth be enforced within the Town of Payson:

A.1 RESPONSIBILITY:

A.2 THE DEPARTMENT: The Water Department (hereinafter called the "Department") of the Town of Payson is invested with the authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions of this ordinance and to prevent water from unapproved sources to enter the potable water system. No water service connection to premises of a type specified in this ordinance shall be installed or maintained unless the public water supply is protected as required by this ordinance.

A.3 THE USER: The user shall not allow any pollutants and contaminants to enter the public potable water system, from the point of delivery from the public potable water system. The user shall at his own expense install, operate, test, and maintain approved backflow preventive assemblies as directed by the Department.

B. DEFINITIONS:

B.1 APPROVED - Accepted by the Department as meeting an applicable specification stated or cited in this ordinance, and as suitable for the proposed use.

B.2 AUXILIARY WATER SUPPLY - Any water supply on or available to the premises other than the public potable water supply, including but not limited to water from another purveyor's public or private potable water supply, treated effluent, wastewaters, industrial fluids or private wells.

SEP 27 '94 Item No. D.2.d

OCT 13 '94 Item No. D.2.b

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B.3 BACKFLOW - The reversal of the normal flow of water caused by either backpressure or backsiphonage.

B.4 BACKPRESSURE - The flow of water or other liquids, mixtures or substances under pressure into the distribution pipes of a potable water supply system from any source or sources other than the intended source.

B.5 BACKSIPHONAGE - The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply from any source other than its intended source caused by the reduction of pressure in the potable water supply system.

B.6 BACKFLOW PREVENTER - An assembly or means designed to prevent the reversal of the normal flow of water caused by either backpressure or backsiphonage.

B.7 AIR GAP - The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of said vessel. An approved air-gap shall be at least double the diameter of the supply pipe, measured vertically, above the overflow rim of the vessel, and in no case less than one inch.

B.8 REDUCED PRESSURE BACKFLOW ASSEMBLY An assembly of two independently acting approved check valves together with a hydraulically operating, mechanically independent differential pressure relief valve located between the check valves and, at the same time, below the first check valve. The unit shall include properly located test cocks and resilient seated shut-off valves at each end of the assembly. The entire device shall meet the design and performance specifications as determined by a recognized laboratory and approved by the Department for backflow prevention assemblies. To be approved, these devices must be readily accessible for in-line testing and maintenance.

B.9 DOUBLE CHECK BACKFLOW ASSEMBLY - An assembly of two independently operating approved check valves with resilient seated shut-off valves on each end of the check valves, plus properly located test cocks for the testing of each check valve. The entire assembly shall meet the design and performance specifications as determined by a recognized laboratory and approved by the Department for backflow prevention assemblies. To be approved these devices must be readily accessible for in-line testing and maintenance.

B.10 PRESSURE VACUUM BREAKER ASSEMBLY - An assembly containing an independently operating loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly shall be equipped with properly located test cocks and resilient seated shut-off valves located at each end of the assembly.

B.11 CONTAMINATION - Means an impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds or other materials to a degree which creates an actual or potential hazard to the public health through poisoning or through the spread of disease.

B.12 CROSS-CONNECTION - Any physical connection or arrangement of piping or fixtures between two otherwise separate piping systems, one of which contains potable water and the other non-potable water or industrial fluids through which, or because of which, backflow may occur into the potable water system. This would include any temporary connections, such as swing connections, removable sections, four-way plug valves, spools, dummy section of pipe, swivel or change-over devices or sliding multiport tube.

B.13 POLLUTION - Means the presence of any foreign substance (organic, inorganic, or biological) in the water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.

B.14 TESTER, RECOGNIZED - The term "Recognized Tester" shall mean a person who has proven his/her competency to the satisfaction of the Department. Each person certified to make competent tests or to repair, overhaul and make reports on backflow prevention assemblies shall be conversant with the applicable laws, rules and regulations and have had experience in plumbing or pipe fitting or have other qualifications which are equivalent in the opinion of the Department.

B.15 WATER, POTABLE - Any water which, according to the Town of Payson, meets nationally recognized standards for human consumption.

B.16 WATER, NONPOTABLE - Water which is not safe for human consumption.

B.17 WATER, SERVICE CONNECTION - The terminal end of the service line from the public potable water system; at its point of delivery to the user's water system. If a meter is installed at the end of the service connection, then the service connection shall mean the downstream end of the meter. Unprotected takeoffs from the service line will not be permitted upstream of any meter or any backflow prevention device located at the point of delivery to the user's water system. Service connection shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the public potable water system.

## C. APPROVAL

C.1 Each backflow prevention assembly required hereunder shall be approved by the Department prior to installation, and shall be installed by and at the expense of the user.

C.2 The Department may approve backflow assemblies when such devices have received approval from the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California, American Water Works Association (A.W.W.A.), and the manufacturer has a parts and service center located within Arizona.

## D. INSTALLATION OF DEVICES

D.1 Assemblies shall be installed at the service connection or near the property line but in all cases, before the first branch line leading off of the service line, and in an accessible location approved by the Department. All assemblies shall be shown and specified on all required building and engineering plans and approval shall be obtained prior to issuance of building and or engineering permit(s). All assemblies shall be installed according to standard detail.

D.2 Backflow preventive assemblies shall have at least the same cross-sectional area as the water service and or meter. In those instances where a continuous water supply is necessary, or if the water supply cannot be temporarily interrupted for testing of assemblies, then two (2) sets of backflow preventive assemblies shall be installed in parallel.

D.3 No bypass shall be installed around backflow prevention assemblies.

D.4 Double check valve assemblies may be installed below ground in a vault if approved, in writing, on a case-by-case basis, by the Department. Double check valve assemblies installed in vaults, shall have sufficient clearance provided to permit testing in place or removal for maintenance, as prescribed in the standard details. Copies available upon request from Department.

D.5 A reduced pressure principle backflow preventive assembly shall be installed above ground. Assemblies installed shall be accessible for testing as not to endanger the tester. Under no conditions except as provided for herein will backflow prevention assemblies be installed less than twelve (12) inches or more than twenty four (24) inches above grade level.

D.6 All pressure type backflow prevention assemblies which are designed for periodic field testing shall be equipped with resilient seated valves on both the upstream and the downstream side of the assembly. In addition, test cocks shall be provided

and located so that test equipment may be connected to the assembly at such points that the pressure in each pressure zone may be detected and, in addition, a test cock shall be located upstream of the upstream shutoff valve, as close as possible to the upstream shutoff valve.

D.7 Backflow assemblies shall be protected from freezing by a method acceptable to the Department.

E. PREMISES OR SYSTEMS REQUIRING APPROVED BACKFLOW PREVENTIVE DEVICES.

E.1 An approved backflow prevention assembly of the type specified in this section shall be the minimum installation of each service connection, (whether from a fire hydrant, temporary, regular or other water service connection) to the following type of premises or systems. Premises or systems not listed herein shall be subject to review by the Department so as to determine the necessity for the installation of an appropriate backflow prevention device.

PREMISES REQUIRING APPROVED BACKFLOW PREVENTION ASSEMBLIES	TYPE OF ASSEMBLY REQUIRED (AND/OR)			
	DOUBLE CHECK	REDUCED PRESSURE	AIR GAP	PRESSURE VACUUM BREAKER
Animal clinics, animal grooming shops		X		
Automotive repair with steam and/or acid cleaning equipment or solvent facilities		X		
Auxiliary water systems (interconnected)		X		
Auxiliary water systems (non-interconnected)	X			
Beverage bottling plants		X		
Breweries	X			
Buildings greater than (3) stories or 34 feet in height	X			

PREMISES REQUIRING APPROVED BACKFLOW PREVENTION ASSEMBLIES	TYPE OF ASSEMBLY REQUIRED (AND/OR)			
	DOUBLE CHECK	REDUCED PRESSURE	AIR GAP	PRESSURE VACUUM BREAKER
Buildings with house pumps or potable water storage	X			
Buildings with sewer ejectors			X	
Canneries, packing houses, and reduction plants		X		
Car wash facilities		X		
Centralized heating and air conditioning plants		X		
Chemical plants		X		
Chemically treated potable or non-potable water systems		X		
Civil works (government owned or operated facilities not open for inspection by the Department)		X		
Commercial laundries		X		
Dairies and cold storage	X			
Dye works			X	
Film processing labs			X	
Food processing			X	
Grade school, High school and colleges			X	
Holding tank disposal stations			X	
Hospitals and mortuaries			X	
Medical and dental buildings			X	
Sanitariums, rest and convalescent homes	X			

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 TYPE OF ASSEMBLY REQUIRED (AND/OR)  
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PREMISES REQUIRING APPROVED BACKFLOW PREVENTION ASSEMBLIES	DOUBLE CHECK	REDUCED PRESSURE	AIR GAP	PRESSURE VACUUM BREAKER
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Irrigation systems (premises having non-potable piping one (1) inch and larger)		X		X
Irrigation systems (premises having separate systems)		X		
Labs using contaminating materials		X		
Manufacturing, processing and fabricating plants using contaminating materials		X		
Mobile home parks		X		
Motion picture studios		X		
Oil and gas production facilities		X		
Plating plants		X		
Radioactive materials processing		X		
Restricted, classified or other closed facilities		X		
Sand and gravel plants		X		
Sewage and storm drainage facilities		X		
Shopping centers		X		
Any premises where a cross-connection is maintained		X		
Water trucks, hydraulic sewer cleaning equipment		X	X	
Any premises where water supplied by the Town is subject to deterioration in sanitary quality and its entry into the public water system		X		

E.2 FIRE PROTECTION SYSTEMS:

Fire protection systems, may be required to have the following type of protection;

PREMISES REQUIRING APPROVED BACKFLOW PREVENTION ASSEMBLIES	TYPE OF ASSEMBLY REQUIRED (AND/OR)			
	DOUBLE CHECK	REDUCED PRESSURE	AIR GAP	PRESSURE VACUUM BREAKER
Direct connection from public water system (non-contaminating)	X			
Direct connection from public water system (contaminating)			X	
With pump and/or storage tank			X	
With auxiliary supply			X	

F. APPROVED BACKFLOW PREVENTIVE ASSEMBLIES

F.1 As designated in section 3.2 the standard installation at each service connection to premises or each system requiring an approved backflow prevention assembly shall be a model and size approved by the Department.

F.2 The term "approved backflow prevention assembly" means an assembly approved by the Department and may mean a assembly that has been manufactured in full conformance with the standards established by the American Water Works Association - AWWA C506-78 most recent revised publication "Standards for Reduced Pressure Principle and Double Check Valve Backflow Prevention Assemblies", and have met completely the laboratory and field performance specifications of the Foundation for Cross-Connection Control and Hydraulic Research (FCCCHR) of the University of Southern California established by:

Specifications of backflow prevention assemblies - Section 10 of the most current issue of the MANUAL OF CROSS-CONNECTION CONTROL, which will be available for inspection.

F.3 Backflow prevention assemblies which may be subject to backpressure or backsiphonage that have been fully tested and have been granted a certificate of approval by FCCCHR may be listed on the current list of "Approved Backflow Prevention Assemblies", which will be made available upon written request to the Department.



## G. MAINTENANCE, TESTING AND RECORDS

G.1 The user shall maintain accurate records of tests and repairs made to backflow prevention assemblies and provide the Department with copies of such records. The records shall be on forms approved by the Department and shall include the list of materials or replacement parts used.

G.2 The user shall notify the Department 15 days in advance when the annual tests are to be done, so that an official representative may witness the tests if so desired by the Department.

G.3 Following the installation or any repair, repiping, overhaul, or relocation of an assembly, the user shall have it inspected by the Department, tested and provide the Department with results of the test, before the Certificate of Occupancy is issued.

G.4 Testing, maintenance and repairs to such assemblies shall be made at the customer's expense by a certified backflow prevention assembly tester who is approved by the Department or any other agency designated by the Department to prescribe test methods or to certify or approve persons to conduct such tests. It shall be the duty of the user to see that these tests are made at least once a year, on the anniversary date of the initial inspection.

## H. INSPECTIONS

H.1 The user's system must be open for inspection at all reasonable times, and in all emergencies to authorized representatives of the Department to determine whether cross-connections or other structural or sanitary hazards, including violations of these regulations, exist. When such a condition becomes known, the Department may deny or immediately discontinue service to the premises by providing a physical break in the service line until the user has corrected the condition in conformance with this ordinance.

## I. DISCONTINUANCE OF SERVICE

I.1 Service of water to any premises may be discontinued by the Department if a backflow prevention assembly required by this ordinance is not installed, tested and maintained; if it has been found that a backflow prevention assembly has been removed or bypassed; or if a cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected. Payson may also terminate a user's service upon twenty (20) days notice in writing in non-emergency.

## J. EXISTING DEVICES AND USERS

J.1 If the Department determines that a user's backflow prevention assembly does not meet current standards, the user shall retrofit his assembly so that it will meet current standards.

J.2 Existing users - Users that have water service prior to the effective date of this ordinance are subject to all requirements imposed by this ordinance.

K. PENALTY

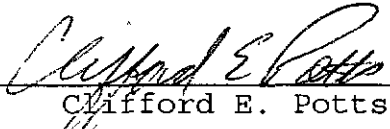
K.1 Any violation of this article shall constitute a misdemeanor, and shall be punishable as set forth in Section 1-8, Payson Town Code.

L. DISCLAIMER OF LIABILITY

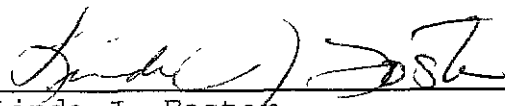
L.1 This ordinance shall not create any liability or duty on the part of the Town of Payson, any officer or employee.

PASSED AND ADOPTED BY THE MAYOR AND COMMON COUNCIL OF THE TOWN OF PAYSON, ARIZONA, this 13<sup>th</sup> day of October, 1994, by the following vote:

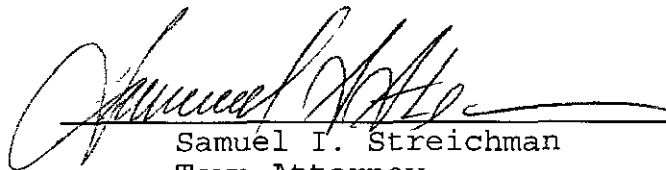
AYES 7 NOES 0 ABSTENTIONS 0 ABSENT 0

  
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Clifford E. Potts, Mayor

ATTEST:

  
\_\_\_\_\_  
Linda J. Foster  
Town Clerk

APPROVED AS TO FORM:

  
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Samuel I. Streichman  
Town Attorney