WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; §9-1001 GENERAL. It shall be unlawful for any person to construct, install, or make a major revision of any lawn sprinkling system without first having obtained from the Building Inspector a permit for said construction or installation within the City limits or the two (2) mile zone surrounding the City. person who shall construct, install or make a major revision of a lawn sprinkling system without first having obtained the required permits shall pay permit fees which are twice the amount of the applicable fees hereinafter prescribed and such person shall not in any way be relieved from complying with all of the provisions of the law applicable to the construction and installation of sprinkling systems. An exemption from the permit requirement is made for sprinkler systems which are not served or supplied by the public potable water system of the City of Crete.

Application for a permit shall be made in writing to the Building Inspector on a form approved by said inspector. All such applications shall be accompanied by plans and specifications in sufficient detail to show clearly the supply piping, pipe sizes, depth of pipes below ground surface, location of valves, vacuum breakers, adjacent curbs, sidewalks, property lines and such other pertinent information required or deemed necessary by the Building Inspector.

A fee of fifteen (\$15.00) dollars per permit shall be paid to the City Clerk. (Amended by Ord. 1729, 04/07/09)

§9-1002 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; LAWN SPRINKLER CONTRACTOR; LICENSE. Any person, firm, partnership or corporation engaging in the business of installing, constructing, altering or repairing any lawn sprinkling system within the corporate limits or within the two (2) mile zone adjacent to the corporate limits of the City of Crete, shall be licensed as law sprinkler contractors.

Application for a license as a lawn sprinkler contractor shall be made to the Building Inspector. This application shall include the name and address of applicant, the business location of the applicant, a statement of the practical experience of the applicant, and such other relevant information as may be required by the said Building Inspector.

A lawn sprinkler contractor licensee fee of twenty-five (\$25.00) dollars shall be paid with the application to the Building Inspector. A license issued pursuant to this section shall expire on December 31st of the year in which it is issued.

Any person, firm, partnership or corporation engaging in the business of installing, constructing, altering or repairing

any lawn sprinkler system, without first having obtained the required license, shall pay license fees twice the amount of the applicable fees herein prescribed and such person shall not in any way be relieved from complying with all of the provisions of the law applicable to the construction and installation of water sprinkler systems.

§9-1003 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; REVOCATION OF LICENSE. The City Council, by a majority vote, shall have the power to revoke the license of any holder of a water sprinkler contractor license pursuant to this Article, upon recommendation of the Building Inspector, if such license were obtained through error or fraud, or if the recipient thereof is shown to be grossly incompetent or has for a second time willfully violated any of the provisions of this Article. This penalty shall be cumulative and, in addition to, the penalties prescribed for the violation of the provisions of this Article. Before a license issued pursuant to this Article can be revoked, a licensee shall have notice in writing enumerating the charges against him, and he shall be entitled to a hearing before the City Council no later than thirty (30) days from the date of receipt of the notice. The licensee shall be given an opportunity to present testimony, oral or written, and shall have the right of cross-examination. All such testimony before the City Council shall be given under oath. The City Council shall have the power to administer oaths, issue subpoenas and compel the attendance of witnesses in such cases.

S9-1004 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; BOND REQUIRED. To guarantee the faithful performance and carrying out of the provisions of this Chapter and all other ordinances pertaining to water sprinkler systems, the licensee shall furnish a surety bond in the sum of one thousand (\$1,000.00) dollars, signed by one or more sufficient sureties or a bond in the like amount of some approved corporate surety doing business through a writing agent in said City.

All bonds furnished by a license holder in accordance with the provisions of this section shall be conditioned: (a) that the licensee shall indemnify and hold harmless the City of and from all accidents, damages, liabilities, claims, judgments, costs or expenses caused by any negligence arising from a failure to protect work done by the licensee, (b) that the licensee shall be governed by the ordinance of the City pertaining to water sprinkler systems, (c) that the licensee shall pay any fine imposed upon him for violation thereof, and (d) the licensee will bring the water sprinkler systems to a

state of perfection which will comply with this Article and other applicable ordinances.

The obligee of said bond shall be the City of Crete, Nebraska, and action may be maintained thereon by anyone injured by it by breach of its condition for a period of one (1) year after completion of any work.

§9-1005 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; CROSS CONNECTION CONTROL.

GENERAL: The purpose of this ordinance is (1) to protect the public potable water supply of the City of Crete water system from contamination or pollution by containing within the consumer's internal distribution system or private water system contaminates or pollutants which could backflow through the service connection into the public potable water supply system, (2) to promote the elimination, containment, isolation, or control of existing cross connections, actual or potential, between the public or consumer's potable water systems and nonpotable water system, plumbing fixtures and industrial-process systems, and (3) to provide for the maintenance of a continuing program of cross connection control which will systematically and effectively prevent the contamination or pollution of all potable water systems.

<u>APPLICATION</u>: This ordinance shall apply to all premises served by the public potable water system of the City of Crete.

<u>POLICY</u>: This ordinance will be reasonably interpreted. It is the <u>City's</u> intent to recognize the varying degrees of hazard and to apply the principle that the degree of protection shall be commensurate with the degree of hazard.

The Municipal Water Department and Health Department shall be primarily responsible for protection of the public potable water distribution system from contamination or pollution due to backflow or contaminants or pollutants through the water service connection. The cooperation of all consumers is required to implement and maintain the program to control cross connections. The consumer is responsible for preventing contamination of the water system within consumer's own premises.

If, in their judgment or their authorized representative, cross connection protection is required through either piping modification or installation of an approved backflow prevention device, thirty (30) days' notice shall be given to the consumer. The failure, refusal or inability on the part of the consumer to provide requested protection within thirty (30) days shall make

the consumer subject to discontinuance of water service at the discretion of the Municipal Water Department, according to the degree of hazard, without further notice.

- §9-1006 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; DEFINITIONS. The following definitions shall apply in the interpretation and enforcement of this ordinance.
- 1. Air gap separation means 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 overflow level rim of the receptacle.
- 2. Auxiliary water supply means any water source or system, other than the public water supply, that may be available in the building or premises.
- 3. Backflow means the flow other than the intended direction of flow, of any foreign liquids, gases, or substances into the distribution system of a public water supply.
- 4. Backflow prevention device means any device, method, or type of construction intended to prevent backflow into a potable water system provided backflow preventers have been tested and approved by a reputable testing laboratory.
- 5. Consumer means the owner or person in control of any premises supplied by or in any manner connected to a public water system.
- 6. Containment means protection of the public water supply by installing a cross connection control device or air gap separation on the main service line to a facility, or as an installation within equipment handling potentially hazardous materials.
- 7. Contamination means an impairment of the quality of the water by sewage, process fluids, or other wastes to a degree which could create an actual hazard to the public health through poisoning or through spread of disease by exposure.
- 8. Cross connection means any physical link, between a potable water supply and any other substance, fluid, or source, which makes possible contamination of the potable water supply due

to the reversal of flow of the water in the piping or distribution system.

- 9. Hazard, Degree of, means an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.
- a. Hazard-Health any condition, device, or practice in the water supply system and its operation which could create or may create a danger to the health and well-being of the water consumer.
- b. Hazard-Plumbing 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 backflow prevention device.
- c. Hazard-Pollutional an actual or potential threat to the physical properties of the water system or to the potability of the public or the consumer's potable water system but which would constitute a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances, but would not be dangerous to health.
- d. Hazard-System an actual or potential threat of severe damage to the physical properties of the public potable water system or the consumer's potable water system, or of a pollution or contamination which would have a protracted effect on the quality of the potable water in the system.
- 10. Industrial Process System means any system containing a 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 a potable water supply.
- 11. Isolation means protection of a facility service line by installing a cross connection control device or air gap separation on an individual fixture, appurtenance, or system.
- 12. Pollution means the presence of any foreign substance (organic, inorganic, or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness 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.

- 13. Public Potable Water System means any publicly or privately owned water system supplying water to the general public which is satisfactory for drinking, culinary and domestic purposes and meets the requirements of the Nebraska Department of Health.
- 14. Service Connection means the terminal end of a service line from the public water system. If a meter is installed at the end of the service, then the service connection means the down stream end of the meter.
- 15. Water Department means the owner, operator, or individual in responsible charge of a public water system.

§9-1007 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; CROSS CONNECTION; PROHIBITED.

- A. No water service connection shall be installed or maintained to any premises where actual or potential cross connections to the public potable or consumer's water system may exist, unless such actual or potential cross connections are abated or controlled to the satisfaction of the Municipal Water Department, and as required by laws and regulations of the Nebraska Department of Health.
- B. No connection shall be installed or maintained whereby an auxiliary water supply may enter a public potable or consumer's water system, unless such auxiliary water supply and the method of connection and use of such supply shall have been approved by the Municipal Water Department and the Nebraska Department of Health.
- C. No water service connection shall be installed or maintained to any premises in which the plumbing system, facilities and fixtures have not been constructed and installed using acceptable plumbing practices considered by the Municipal Water Department as necessary for the protection of health and safety.

§9-1008 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; SURVEY AND INVESTIGATIONS.

- A. The Consumer shall provide access to the premises at reasonable times to the Municipal Water Department, or its authorized representative, for the conduction of surveys and investigations of water use practices within the consumer's premises to determine whether there are actual or potential cross connections to the consumer's water system through which contaminants or pollutants could backflow into the public potable water system.
- B. On request by the Municipal Water Department, or its authorized representative, the consumer shall furnish information on water use practices within his premises.
- C. It shall be the responsibility of the water consumer to con duct periodic surveys of water use practices on his premises to determine whether there are actual or potential cross connections to his water system through which contaminants or pollutants could backflow into his or the public potable water system.
- §9-1009 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; TYPE OF PROTECTION REQUIRED. The type of protection required by this ordinance shall depend on the degree of hazard which exists, as follows:
- 1. An approved air gap separation shall be installed where the public potable water system may be contaminated with substances that could cause a severe health hazard.
- 2. An approved air gap separation or an approved reduced pressure principle backflow prevention device shall be installed where the public potable water system may be contaminated with a substance that could cause a health hazard.
- 3. An approved air gap separation or an approved reduced pressure principle backflow prevention device or an approved double check valve assembly shall be installed where the public potable water system may be polluted with substances what could cause a pollutional hazard not dangerous to health.

§9-1010 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; WHERE PROTECTION IS REQUIRED.

A. An approved backflow prevention device shall be installed in the service connection line to a consumer's water system or

within any premises where, in the judgment of the Municipal Water Department or the Nebraska Department of Health, actual or potential hazards to the public potable water system exists. The type and degree of protection required shall be commensurate with the degree of hazard.

- B. An approved air gap separation or reduced pressure principle backflow prevention device shall be Installed at the service connection or within any premises where, In the judgment of the Municipal Water Department or the Nebraska Department of Health, the nature and extent of activities on the premises, or the materials used In connection with the activities or materials stored on the premises, would present an immediate and dangerous hazard to health should a cross connection occur, even though such cross connection may not exist at the time the backflow prevention device is required to be installed. This includes, but is not limited to, the following situations:
- 1. Premises having auxiliary water supply, unless the quality of the auxiliary supply is acceptable to the Municipal Water Department and the Nebraska Department of Health.
- 2. Premises having internal cross connections that are not correctable, or intricate plumbing arrangements which make it impractical to ascertain whether or not cross connections exist.
- 3. Premises where entry is restricted so that Inspections for cross connections cannot be made with sufficient frequency or at sufficiently short notice to assure the cross connections do not exist.
- 4. Premises that although not covered by code are subject to frequent modification which would change their status, or premises that have had backflow code violations.
- 5. Premises on which any substance is handled under pressure so as to permit entry into the public water supply, or where a cross connection could reasonably be expected to occur. This shall include the handling of process waters and cooling waters.
- 6. Premises where materials of a toxic or hazardous nature are handled such that if back-siphonage or backpressure should occur, a serious health hazard may occur.

CHAPTER 9

BUILDING REGULATIONS

Article 10. Water Department

- C. The following types of facilities must install or have in operation an approved air gap separation, atmospheric vacuum breaker, or reduced pressure principal backflow prevention device as required by the Municipal Water Department and the Nebraska Department of Health to protect the public water supply, and such must be installed at these facilities unless all hazardous or potentially hazardous conditions have been eliminated or corrected by other methods to the satisfaction of the Municipal Water Department and the Nebraska Department of Health:
 - 1. Auxiliary Water Systems
 - 2. Beverage Bottling Plants
 - 3. Canneries, Packing Houses, Reduction Plants
 - 4. Car Washing Facilities
- 5. Chemical Manufacturing, Processing, Compounding or Treatment Plants
 - 6. Chemically Contaminated Water Systems
 - 7. Dairies and Cold Storage Plants
 - 8. Film Laboratories
 - 9. Fire Protection Systems
 - 10. Hazardous Waste Storage and Disposal
 - 11. Hospital, Mortuaries, Clinics
- 12. Sprinkler Systems and Hose Connections Injecting Directly Materials of a Toxic or Hazardous Nature
 - 13. Laundries and Dye Works
- 14. Metal Manufacturing, Cleaning, Processing and Fabricating Plants
- 15. Oil and Gas Production, Storage or Transmission Properties
 - 16. Plating Plants
 - 17. Printing and Publishing Facilities
 - 18. Research and Analytical Laboratories
- 19. Sewage and Storm Drainage Facilities Pumping Stations
 - 20. Zoological and Horticultural Gardens
 - 21. All Cemetery Sprinkler Systems
 - 22. Pet Grooming and Veterinarian Hospitals
 - 23. Class A, B & C Swimming Pools
- 24. Cooling Coil Service Lines (Refrigeration, Air conditioning, Etc.)
 - 25. All Hot Water and Steam Boiler Heating Systems.

These facilities, falling into one or more of the above categories will be given twelve (12) months after passage of this ordinance to comply with said ordinance and regulations,

except those facilities or systems which are determined by the Municipal Water Department to be an immediate or severe health hazard, in which case that system or facility shall be required to comply immediately with this ordinance and regulation.

§9-1011 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; BACK FLOW PREVENTION DEVICES.

- A. Any backflow prevention device required by this ordinance shall be a model or construction approved by the Municipal Water Department and the Nebraska Department of Health.
- 1. Air gap separation to be approved shall be at least double the diameter of the supply pipe measured vertically above the flood level rim of the vessel, but in no case less than one (1") inch.
- 2. A double check valve assembly or a reduced pressure principal backflow prevention device shall be approved by the Municipal Water Department and shall appear on the current "list of approved backflow prevention devices" established by the Water Department.
- B. Existing backflow prevention devices approved by the Utilities Manager at the time of installation and properly maintained shall, except for inspection and maintenance requirements, be excluded from the requirements of this ordinance, so long as the Municipal Water Department is assured that they will satisfactorily protect the water system. Whenever the existing device is moved from its present location, or requires more than minimum maintenance, or when the Water Department finds that their maintenance constitutes a hazard to health, the unit shall be replaced by a backflow prevention device meeting the requirement of this ordinance.

§9-1012 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; INSTALLATION.

- A. Backflow prevention devices required by this ordinance shall be installed at a location and in a manner approved by the Municipal Water Department and shall be installed at the expense of the water consumer.
- B. Backflow prevention devices installed on the service line to the consumer's water system shall be located on the consumer's side of the water meter, as close to the meter as is reasonably practical, and prior to any other connection.

- C. Backflow prevention devices shall be located so as to be readily accessible for maintenance and testing, protected from freezing, and where no part of the device will be submerged or subject to flooding by any fluid.
- D. Backflow prevention devices for underground sprinklers that have an opening to the atmosphere shall be located at least six (6") inches above the highest ground served by the sprinkler system.

§9-1013 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; INSPECTION AND MAINTENANCE.

- A. It shall be the duty of the consumer at any premises on which backflow prevention devices required by this ordinance are installed to have inspections, tests, and overhauls made in accordance with the following schedule or more often where inspections indicate a need.
- 1. Air gap separations shall be inspected at the time of installation and at least every twelve (12) months thereafter.
- 2. Double check valve assemblies shall be inspected and tested for tightness at the time of installation and at least every twelve (12) months thereafter. They shall be dismantled, inspected internally, cleaned and repaired whenever needed and at least every three (3) years.
- 3. Reduced pressure principal backflow prevention devices shall be inspected and tested for tightness at the time of installation and at least every twelve (12) months thereafter. They shall be dismantled, inspected internally, cleaned and repaired whenever needed and at least every five (5) years.
- B. Overhauls of backflow prevention devices shall be made at the expense of the water consumer and shall be performed by the Municipal Water Department or a State of Nebraska Certified Backflow Prevention Device Tester.
- C. Backflow prevention devices designed with testing cocks shall be inspected and tested each year and those tests performed by the Municipal Water Department will be at the expense of the Water Department. The tests performed by others shall be at the expense of the consumer.

- D. Whenever backflow prevention devices required by this ordinance are found to be defective, they shall be repaired or replaced at the expense of the consumer without delay.
- E. The water consumer must maintain a complete record of each backflow prevention device that has test cocks from purchase to retirement. Records of inspections, tests, repairs and over-hauls performed by others shall be submitted to the Municipal Water Department annually.
- F. Backflow prevention devices shall not be bypassed, made inoperative, removed or otherwise made ineffective without specific authorization by the Municipal Water Department.

§9-1014 WATER DEPARTMENT; INTERCONNECTION OF WATER LINES; VIOLATIONS.

- A. The Municipal Water Department or Public Works Director shall have the right to deny or discontinue, after thirty (30) days' notice to the occupants thereof, the water service to any premises wherein any backflow prevention device required by this ordinance is not installed, tested, and maintained in a manner acceptable to the Municipal Water Department, or if it is found that the backflow prevention device has been removed or by-passed or if an unprotected cross connection exists on said premises.
- B. Water service to such premises shall not be restored until the consumer has corrected or eliminated such conditions or defects in conformance with this ordinance to the satisfaction of the Municipal Water Department.
- C. The City Health Department shall be advised of inspection findings, and the violation abatement action pursued by the Municipal Water Department, and consulted, prior to violation abatement action, on items having to do with Public Health significance. (9-1001 through 9-1014 transferred from Chapter 3 by Ord. No. 1660; 10/17/06)