

**CHAPTER 18**

**CONTROL OF BACKFLOW AND CROSS CONNECTIONS**

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## CHAPTER 18

### CONTROL OF BACKFLOW AND CROSS CONNECTIONS

#### SECTION 18-1. CROSS CONNECTIONS - GENERAL POLICY

##### 18-1-1 Purpose of Ordinance:

- A. To protect the safe drinking water supply of Howell Town Corporation from the possibility of contamination or pollution by requiring compliance with state and local plumbing codes, health regulations, OSHA and other applicable industry standards for water system safety within the consumer's internal distribution system or private water system(s). Compliance with these minimum safety codes will be considered reasonable vigilance for prevention of contaminants or pollutants which could backflow into the public drinking water systems; and
- B. To promote reasonable elimination or control of cross connections in the plumbing fixtures and industrial piping system(s) of the consumer, as required by state and local plumbing codes, health regulations, OSHA and other applicable industry standards to assure water system safety; and
- C. To provide for the administration of a continuing program of backflow prevention which will systematically and effectively prevent the contamination or pollution of all drinking water systems.

##### 18-1-2 Duties and Responsibilities:

- A. Howell Town Corporation shall be responsible for the protection of the drinking water distributions system from foreseeable conditions leading to the possible contamination or pollution of the drinking water system due to the backflow of contaminants or pollutants into the drinking water supply.
- B. Drinking water system surveys/inspections of the consumer's water distribution system(s) shall be conducted or caused to be conducted by individuals deemed qualified by the representing Howell Town. Survey records shall indicate compliance with the aforementioned health and safety standards. All such records will be maintained by Howell Town.
- C. Howell Town shall notify in writing, all consumers of the need for the periodic system survey to insure compliance with existing applicable minimum health and safety standards.

- D. Selection of an approved backflow prevention assembly for containment control required at the service entrance shall be determined from the results of the system survey.
- E. Howell Town shall not be held legally liable for damage or injuries caused or affected as a result of contamination of the culinary and drinking water system due to negligence or willful violation by any consumer/water user or any third party.

18-1-3 Consumer’s Duties and Responsibilities.

- A. To comply with this ordinance as a term and condition of supply the consumer’s acceptance of service is admittance of his/her awareness.
- B. It shall be the responsibility of the consumer to purchase, install, test and maintain any backflow prevention device/assembly required to comply with this ordinance.
- C. Any consumer actions, whether negligently or otherwise, whether caused directly or through third parties, causes contamination of the water system as a result of improper backflow or cross-connection, shall indemnify and hold harmless Howell Town Corporation from any and all liability.

18-1-4 Plumbing Official Responsibility:

- A. The plumbing officials responsibility to enforce the applicable sections of the plumbing code begins at the point of service (downstream or consumer side of the meter) and continues throughout the developed length of the consumer’s water system.
- B. The plumbing official will review all plans to ensure that unprotected cross connections are not an integral part of the consumer’s water system. If a cross connection cannot be eliminated, it must be protected by the installation of an air gap or an approved backflow prevention device/assembly, in accordance with the Utah Plumbing Code.
- C. Water vacating the drinking water supply must do so via approved air gap or approved mechanical backflow prevention assembly, properly installed and in accordance with the Utah Plumbing Code.

18-1-5 Certified Backflow Assembly Technicians, Surveyors or Repairs Person Responsibilities:

- A. Whether employed by the consumer or a utility to survey, test, repair, or maintain backflow prevention assemblies the Certified Backflow

Technicians, Surveyors or Repair Persons will have the following responsibilities:

1. Insuring acceptable testing equipment and procedures are used for testing, repairing or overhauling backflow prevention assemblies.
  2. Make reports of such testing and/or repair to the consumer, water surveyor, and the Bureau of Drinking Water/Sanitation on forms approved for such use by the Bureau of Drinking Water/Sanitation, within the time frames prescribed by the Bureau of Drinking Water/Sanitation.
  3. The report shall include the list of materials or replacement parts used.
  4. Insuring replacement parts are equal in quality to parts originally supplied by the manufacturer of the assembly being required.
  5. Not changing the design, material or operational characteristics of the assembly during testing, repair or maintenance.
  6. A Certified Technician shall perform all tests of the mechanical devices/assemblies and be responsible for competence and accuracy of all tests and reports.
  7. Insuring his license is current, the testing equipment being used is acceptable to the state, and is in proper operating condition.
  8. Be equipped with, and be competent to use, all necessary tools, gauges, and other equipment necessary to properly test, and maintain backflow prevention assemblies.
- B. In the case of the consumer requiring a commercially available technician, any certified technician is authorized to make the test and report the results of that test to the consumer, water purveyor and the Bureau of Drinking Water/Sanitation. If such a commercially tested assembly is in need of repair, the Plumbers Law of Utah, Section 58A-2-5-(3), requires a licensed plumber make the actual repair.

## SECTION 18-2. DEFINITIONS

- A. Water Superintendent: The person designated to be in charge of the Water Department of Howell Town, is invested with authority and responsibility for the implementation of an effective backflow and cross connection control program and for the enforcement of the provisions of this ordinance.
- B. Approved Backflow Assembly: Accepted by the Utah Dept. of Health, Bureau of Drinking Water/Sanitation, as meeting an applicable specification or as suitable for the proposed use.
- C. Auxiliary Water Supply: Any water supply on or available to the premises other than the purveyor's public water supply will be considered as an auxiliary water supply. These auxiliary waters may include water from another purveyor's public potable water supply or any natural source(s) such as a well, spring, river, stream, harbor, etc., or "used waters" or "industrial fluids". These waters may be contaminated or polluted or they may be objectionable and constitute an authority for sanitary control.
- D. Backflow: The reversal of the normal flow of water caused by either back-pressure or back-siphonage.
- E. Back-Pressure: The flow of water or other liquids, mixtures, or substances under pressure into the feeding distribution pipes of a potable water supply system from any source(s) other than the intended source.
- F. Backsiphonage: The backflow of potentially contaminated, polluted or used water into the potable water system as a result of the pressure in the potable water system falling below atmospheric pressure of the plumbing fixtures, pools tanks or vats connected to the potable water distribution piping. (Utah Administrative Code R156-56-803(2))
- G. Backflow Prevention Assembly: An assembly or means designed to prevent backflow. Specifications for backflow prevention assemblies are contained within the Utah Plumbing Code, Chapter 10, (Appendix 3), and the Cross Connection Control Program for Utah.
- H. Contamination: Means degradation of the quality of the potable water supply by sewage, industrial fluids or waste liquids, compounds or other materials.
- I. Cross Connection: Any physical connection or potential connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other either water of unknown or questionable safety or steam, gas or chemical, whereby there exists the

possibility for flow from one system to the other, with the direction of flow depending on the pressure differential between the two systems (see “Backflow”). (Utah Administrative Code R156-56-803 (4))

- J. Cross Connection – Controlled: A connection between a potable water system and a non-potable water system with an approved backflow prevention assembly properly installed and maintained so that it will continuously afford the protection commensurate with the degree of hazard.
- K. Cross Connection – Containment: The installation of an approved backflow assembly at the water service connection to any customer’s premises where it is physically and economically infeasible to find and permanently eliminate or control all actual or potential cross connections within the customer’s water system; or, it shall mean the installation of an approved backflow prevention assembly on the service line leading to and supplying a portion of a customer’s water system where there are actual or potential cross connections which cannot be effectively eliminated or controlled at the point of the cross connection (isolation).
- L. Consumer – Shall be defined as any Howell Town citizen or entity who uses and/or benefits from culinary drinking water delivered to their/its property or facilities.
- M. Certified Backflow Technician/Operator: Any person certified in the State of Utah as a licensed plumber or who has obtained certification through the State of Utah Division of Water Resources as a backflow technician or cross-connection technician or specialist.

### **SECTION 18-3. REQUIREMENTS**

#### **18-3-1 Policy:**

- A. No water service connection to any premises shall be installed or maintained by the Public Water Purveyor unless the water supply is protected as required by State laws, regulations, codes, and this ordinance. Service of water to a consumer found to be in violation of this ordinance shall be discontinued by the water purveyor after due process of written notification of violation, and at the discretion of the Water Purveyor, be suspended from water service, if:
  - 1. A backflow prevention assembly required by this ordinance for control of backflow and cross connections is not installed, tested, and maintained, or

2. If it is found that a backflow prevention assembly has been removed or by passed, or
3. If an unprotected cross connection exists on the premises, or
4. If the periodic system survey has not been conducted.

Service will not be restored until such conditions or defects are corrected.

- B. The customer's system(s) shall be open for inspection at all reasonable times to authorized representatives of the water purveyor to determine whether cross connections or other structural or sanitary hazards, including violation of this ordinance exist and to audit the results of the required survey (See this Ordinance section 18-1-2B).
- C. Whenever the public water purveyor deems a water connection lacks a backflow device or if a device is no longer properly operating, and such usage contributes or proposes a risk of contamination to the water supply, an approved backflow prevention assembly shall be installed on the service line of the identified consumer's water system, at or near the property line, or immediately inside the building being served; but, in all cases, before the first branch line leading off the service line.
- D. The type of protective assembly required under the above section 18-2-3C shall depend upon the degree of hazard which exists at the point of cross connection (whether direct or indirect), applicable to local and state requirements or resulting from the required survey.
- E. All presently installed backflow prevention assemblies which do not meet the requirements of this section but were approved assemblies for the purposes described herein at the time of installation and which have been properly maintained, shall, except for the inspection and maintenance requirements under subsection 18-3-1 F, be excluded from the requirements of these rules so long as the water purveyor is assured that they will satisfactorily protect the public water system. Whenever the existing assembly is moved from the present location or, requires more than minimum maintenance or, when the water purveyor finds that the operation or maintenance of this assembly constitutes a hazard to health, the unit shall be replaced by an approved backflow prevention assembly meeting the local and state requirements.
- F. It shall be the responsibility of the consumer at any premises where backflow prevention assemblies are installed to have certified surveys/inspections, and operational tests made at the discretion of the

Water Purveyor. In those instances where the Water Purveyor deems the backflow device defective or if contamination is evident or in question, he may require certified surveys/inspections at a more frequent interval or demand replacement of the device. It shall be the duty of the Public Water Purveyor to see that these tests are made according to the standards set forth by the State Department of Health, Bureau of Drinking Water/Sanitation.

G. All backflow prevention assemblies shall be tested within ten (10) working days of initial installation.

H. No backflow prevention assembly shall be installed so as to create a safety hazard. Example: Installed over electrical panels, steam pipes, boilers, pit or above ceiling level.

18-3-2 If violations of this ordinance exist or if there has not been any corrective action taken by the consumer within 10 days of the written notification of deficiencies noted within the survey, then the public water purveyor shall deny or immediately discontinue service to the premises by providing a physical break in the service line until the customer has corrected the condition(s) in conformance with the State and City statutes relating to plumbing, safe drinking water supplies and the regulations adopted pursuant thereto.

18-3-3 PENALTIES.

Any Consumer who, after having their/its water service disconnected by the Water Purveyor, negligently or willfully reconnects to the public culinary/drinking water system, shall be liable and subject to penalties as set forth in Utah Code §19-4-109, which may include a civil penalty up to \$1,000.00 per day for each day of violation and may be subject to criminal prosecution.