

CHAPTER 12 WATER AND SEWER

Article 12 – 1 GENERAL PROVISION

- 12 – 1 – 1 Consumer Application for Service
- 12 – 1 – 2 Utility Revenues

Sec. 12 – 1 – 1 Consumer Application for Service

- A. A consumer shall make written application for water service and a sewer connection permit to the town at town hall in person or by first class mail in the form prescribed by the town manager.
- B. It is unlawful to connect to or make discharges to the town's public sanitary sewer system or to connect to or withdraw potable water from the town's potable water system without authorization by the town manager.

Sec. 12 – 1 – 2 Utility Revenues

- A. The town's potable water utility shall be operated as a separate enterprise fund, with all revenues derived from charges or fees for potable water service deposited in a separate fund to be known as the water utility fund. The revenues so collected shall be used exclusively for the operation, maintenance and capital costs associated with the water utility.
- B. The town's public sanitary sewer utility shall be operated as a separate enterprise fund, with all revenues derived from charges or fees for sanitary sewer service deposited in a separate fund to be known as the sewer utility fund. The revenues so collected shall be used exclusively for the operation, maintenance and capital costs associated with the sewer utility.
- C. The town council shall set utility user rates and charges to generate sufficient revenues to operate the water and sewer utilities as self-sufficient enterprises.

Article 12 – 2 SEWER RATES AND CHARGES

- 12 – 2 – 1 Monthly Sewer Service Charges
- 12 – 2 – 2 Sewer Installation Charge
- 12 – 2 – 3 Connection When Available Required
- 12 – 2 – 4 Sewer Service Charges Responsibility of Property Owner
- 12 – 2 – 5 Failure to Pay Bill When Due
- 12 – 2 – 6 Lien for Delinquent Charges

Section 12 - 2 - 1 Monthly Sewer Service Charges

- A. The council by resolution shall adopt monthly sewer service charges, to include but not necessarily limited to an availability fee, a minimum charge per active sewer connection, additional charges based on the volume and nature of the user, and a low-income discount rate.
- B. The sewer user charges shall also include a requirement for a security deposit, which must be paid prior to obtaining sewer discharge authorization.

Sec. 12 - 2 - 2 Sewer Installation Charges

The council by resolution shall adopt a schedule of charges for the Town's installation and construction of sewer service to the property line, for both inside and outside of the sewer improvement district.

Sec. 12 – 2 – 3 Connection When Available Required; Availability Fees

- A. At such times as a public sewer becomes available to a property served by a private sewage disposal system, a direct connection shall be made to the public sewer in accordance with the provisions of this chapter and the town plumbing code within one year of its availability, or sooner if inspection shows need for servicing and deemed necessary by the appropriate health officer, and any septic tanks, cesspools, and similar private disposal facilities shall be abandoned and filled according to the plumbing code of the town.
- B. After connection to the public sewer becomes mandatory pursuant to subsection A, an availability fee established by council shall be assessed monthly against the property whether or not a connection has been established with the public sewer system, and no permits shall be issued nor work permitted to construct, alter or improve private a sewage disposal system on the property.
- C. Any availability fee established by the town council shall also be assessed against all properties connected to the public sanitary sewer system
- D. The town manager shall notify all owners or occupiers of the property when that service is available, and the times herein mentioned shall run from the date of said notice.

Sec. 12 – 2 – 4 Sewer Service Charges To Be Responsibility Of Property Owner

Except for residential property of four or fewer units, the owner or owners of real property receiving public sanitary sewer service, which includes sewer availability, from the town shall be primarily responsible for the payment of user charges whenever such property is occupied and contributing wastewater for collection and treatment, whether or not there is a tenant or occupant in possession of said property who opens or maintains an account for sewer service with the town.

Sec. 12 – 2 – 5 Failure To Pay Bill When Due

All town sewer utility bills are due when presented for payment, and shall be deemed past due and delinquent thirty (30) days after presentment with such delinquency to be deemed retroactive to date of presentment. All delinquent sewer utility bills shall include a one-time administrative penalty of five (5) dollars and accrue interest at the rate of one percent per month until paid. Said penalty and interest, or any portion thereof, may be waived for good cause by the town clerk upon full payment of all outstanding sewer charges.

Sec. 12 – 2 – 6 Lien For Delinquent Charges

- A. Where the owner of the property is responsible for payment of such user charges, delinquent sewer service charges shall constitute a lien against the property receiving sewer service. The procedure to perfect such lien shall be as follows:

1. The town clerk shall provide written notice to the owner of the property any time after the account is thirty (30) days or more in arrears by either personally serving or mailing to the owner's last-known address by certified or registered mail if the owner does not reside on the property, or the address to which the sewer service bill was sent. This written notice shall indicate that the town shall impress and secure a lien on the subject property for all fees that become or have been delinquent for ninety (90) days or more. The notice shall also contain a statement that the owner, occupant or lessee may appeal the delinquency to the town clerk by filing such appeal within the thirty days after receipt of such notice.
 2. Upon expiration of the thirty (30) day cure period of subsection (a)(1) above, the town clerk, for all sewer accounts more than ninety (90) days delinquent, shall prepare a notice and claim of lien and file the original thereof with the county recorder, and serve or mail by registered or certified mail a copy to the owner, occupant or lessee of the property. The notice and claim of lien shall be made under oath by the town clerk or his duly authorized designee and shall contain the following:
 - a. A description of the property sufficient for its identification;
 - b. The name of the owner or reputed owner of the property if known, otherwise the name of the occupant or lessee to whom service was rendered;
 - c. The amount of the fees that are delinquent for ninety (90) days or more, which shall be the claimed lien amount;
 - d. A statement that the claimed lien amount shall accrue interest after recording at the rate prescribed by A.R.S. § 44-1201.
- B. From and after the date of its recording in the office of the county recorder, the lien shall attach to the property until paid. Said lien shall accrue interest after recording at the rate prescribed by A.R.S. § 44-1201. A sale of the property to satisfy the lien shall be made upon judgment of foreclosure and order of sale. The town shall have the right to bring an action to enforce the lien in the county superior court at any time after its recording, but failure to enforce the lien by such action shall not affect its validity. The recorded notice and claim of lien shall be prima facie evidence of the truth of all matters recited therein and of the regularity of all proceedings prior to the recording of said lien.
- C. A prior recording for the purposes provided in this section shall not be a bar to a subsequent recording of a lien for such purposes, and any number of liens on the same lot or tract of land may be enforced in the same action.

Article 12 – 3

WATER RATES AND CHARGES

- | | |
|------------|--|
| 12 - 3 - 1 | Minimum Charges and Volume Based Rates |
| 12 - 3 - 2 | Installation of Water Service |
| 12 - 3 - 3 | Meter Deposit for Rental Property |
| 12 - 3 - 4 | Failure to Pay Bill When Due |
| 12 - 3 - 5 | Metered Connection When Available Required |

Sec. 12 - 3 – 1 Minimum Charges and Volume Based Rates

The council by resolution shall adopt user rates for potable water service that shall include but not necessarily limited to base charges, which may vary based on category of user, a charge based on the volume of water consumed above the base amount, bulk water rates and a low-income discount.

Sec. 12 - 3 – 2 Water Installation Charges

The council by resolution shall adopt a schedule of charges for the Town's installation and construction of water service to the property line, for both inside and outside of the water improvement district.

Sec. 12 - 3 – 3 Meter Deposit Required

- A. A meter deposit equivalent to a three month minimum water charge will be due and payable to the town before the meter is unlocked for use. Such security deposit shall be applied to any amount more than 40 days past due.
- B. If the meter is locked pursuant to Section 12 – 3 – 4 and the deposit is debited to off-set the outstanding amounts owing pursuant to subsection A, then a new deposit shall be required prior to re-establishing water service to the property. If the customer has had an acceptable payment history of no delinquent payments, the security deposit will be credited to the account one year from the date of the deposit.
- C. Such security deposit shall be refunded prior to the one year if the customer terminates the service, provided all fees are paid in full.
- D. If the customer allows the account to become delinquent after such time that the security deposit funds have been credited to the account, a new deposit of equivalent of three month minimum water bill will be required.

Sec. 12 - 3 – 4 Failure to Pay Bill When Due

- A. If any bill is not paid within thirty days following the presentation of the bill, a notice of delinquency shall appear on the next monthly bill. If within five working days of the notice of delinquency the bill is not paid, the water supply will, without further notice, be turned off, and not turned on again until all amounts due are paid in full, together with a service restoration charge in an amount established by resolution of council.
- B. The town manager, at his sole discretion, may enter into a payment plan for a water customer for good cause shown.

Section 12 – 3 – 5 Metered Connection When Available Required

- A. Every residence within the water improvement district shall be required to have a metered water connection if no other potable water supply is available.
- B. At such times as town's water system service becomes available, an availability fee shall be assessed against the property and a metered connection to the town's water system shall be made in accordance with the provisions of this Chapter and the town plumbing code within one year.

- C. The town engineer shall notify all owners or occupiers of the property when the service is available, and the times herein mentioned shall run from the date of said notice.

Article 12 – 4 CONSUMER AND TOWN RESPONSIBILITIES

12 - 4 - 1 Town Responsibilities and Liabilities

12 - 4 - 2 Consumer Responsibilities

12 - 4 - 3 Access to Premises

Section 12 - 4 – 1 Town Responsibilities and Liabilities

- A. The town shall not assume the responsibility of inspecting consumer's piping or apparatus and shall not be responsible therefor.
- B. The town shall refuse service unless consumer's lines or piping are installed in such manner as to prevent cross-connections or back flow.
- C. Under normal conditions, the town shall notify a consumer of any anticipated interruption of service.
- D. The town shall not be responsible for negligence of third persons or forces beyond the control of the town, resulting in any interruption of service.

Sec. 12 - 4 – 2 Consumer Responsibilities

- A. Piping on consumer's premises shall be so arranged that the connections are conveniently located with respect to the municipal water system lines or main.
- B. If consumer's piping on consumer's premises is so arranged that it is necessary for the town to provide additional meters, each place of metering shall be considered as a separate and individual account.
- C. Where a meter is placed on a consumer's premises, the consumer shall provide a suitable place for such meter, which place shall be unobstructed and accessible at all times to the meter reader.
- D. Consumer shall furnish and maintain a private cut-off valve on consumer's side of the meter, and the town shall provide a like valve on the town's side of each meter.
- E. Consumer shall install consumer's piping and apparatus and maintain it in a safe and efficient manner and at consumer's own expense, in accordance with the town's rules and regulations and in full compliance with the regulations of the State Department of Health Services.
- F. Consumer shall safeguard the town's property placed on consumer's premises and shall permit access to it only by the authorized representatives of the town.
- G. In the event of any loss or damage to the property of the town being used to provide water or sewer service to consumer, consumer shall pay to the town the cost of the necessary repairs or replacements, and consumer shall assume any liability otherwise resulting. The

town shall add the amount of such loss or damage to consumer's bill, and, if such amount is not paid, the town shall discontinue service to consumer.

- H. Only consumer, members of consumer's household, guests, tenants and employees of consumer shall use water furnished by the town to consumer. Consumer shall not sell such water to any other person nor permit any other person to use such water. Failure to comply with this provision shall be cause to terminate water service, provided that at least ten days notice and an opportunity to be heard is provided to the consumer prior to terminating service.
- I. During a critical water condition, as determined by the town or another public agency, consumer shall use water only for those purposes which the town shall specify. Consumer's disregard for this rule shall be sufficient cause for discontinuance of service or refusal of renewed service.

Sec. 12 - 4 – 3 Access to Premises

- A. Duly authorized agents of the town shall have access, at all reasonable hours, to the premises of consumer for the purposes of installing or removing town property, inspecting piping, reading or testing meters, or for any other purpose in connection with the town's service or facilities.
- B. Each consumer shall grant or convey or shall cause to be granted or conveyed to the town a permanent easement across any property owned or controlled by the consumer wherever such easement is necessary to enable the town to furnish water or sewer service. Consumer shall not erect a fence around, across or on said easement or any other water system facility without the approval of the town.

Article 12 – 5 EXTENSIONS

- 12 - 5 - 1 Standards for Extensions
- 12 - 5 - 2 Computation of Cost
- 12 - 5 - 3 Other Basis of Extensions Permissible
- 12 - 5 - 4 Responsibility of Town
- 12 - 5 - 5 Right to Refuse Applications

Sec. 12 - 5 – 1 Standards for Extensions

- A. The provisions of this article shall constitute the standards for extension of water mains, sewers and related facilities by utilities.
- B. Each utility shall permit, upon written request for service by a prospective customer, or a group of prospective customers located in the same neighborhood, an extension necessary to give service when the prospective customer or customers agree to pay the full cost of the extension, including connection costs.
- C. Such an extension shall be made under the following conditions:
 - 1. Determination of Cost. The applicant or applicants shall prepare an estimate of the total cost of the extension from its existing main or mains which is to serve the extension to the end of the lot or frontage of the most remote applicant to be served; provided, however, that if this be a corner lot abutting an intersecting street or a lot immediately

adjacent to such a corner lot, the terminal point of the extension shall be located so that the main constructed hereunder ties in with the existing main located in such intersecting street, and, if there is no main located in such intersecting street, the terminal point of the extension made hereunder shall be located at the center line of such intersecting street. Such estimated total cost of the main extension, subject to council approval, shall be computed in accordance with the provisions of Section 12-5-2, and the amount thereof as so determined shall constitute and be referred to hereunder as the cost of the main extension

2. Determination of Number of Lots to be Served. A determination shall be made of the number of lots to be served by the main extension. Only lots, as herein defined, which directly abut the main extension between its original beginning and its original terminus shall be included in such determination. If all or any part of such main extension is located within an area platted or to be platted, the number of such lots as shown within such plat to be served shall be included. If all or any part of such main extension is located in an unplatted area, the number of lots to be included shall be determined by dividing the total front footage of the main extension within such unplatted area on both sides of the street, alley or right of way in which the main is located by 50 feet around to the nearest whole number of lots. Any further main extension subsequently connected to the original main extension shall, for all purposes under this article, constitute a separate main extension.
3. Determination of Cost Per Lot. The total number of lots to be served by the main extension shall be divided into the cost of such main extension, as determined above, in order to calculate the cost per lot of the main extension.
4. Basis and Allocation of Initial Deposit. To the cost of such main extension shall be added the connection costs for service to the applicant or applicants for such main extension. The applicants who apply for and are to take service from the proposed extension within six months after it is placed in service shall make the total deposit, in a cash payment, of the estimated cost of the extension. Unless otherwise arranged among the applicants, each applicant shall pay to the utility his proportionate share of the total deposit determined as above provided, on the basis which the number of lots for which service is requested by such applicant bears to the total number of lots for which service is requested by all such applicants.
5. Deposits Required by Subsequent Connectors. If and when at any time after the main extension is placed in service, the owner or occupant of any unserved lot included in the main extension but not included in the original applications requests service, the utility shall, subject to the limitations provided in this article, collect from each such new applicant a cash deposit equal to the cost per lot, as calculated in accordance with paragraph 3 of this subsection, of the main extension multiplied by the number of lots for which service is so requested. In addition, each such new applicant shall pay a late charge equal to fifteen percent of his deposit as computed above.
6. Refunds on Basis of Such Subsequent Connections. Monies thus collected by the utility from new connections within a period of ten years after the extension is placed in service shall be refunded to the original applicants and prior connectors who have made deposits for such main extension, in proportion to their respective original deposits, including any late charge. Notwithstanding the foregoing, in no event shall the total refunds to any original applicant or connector exceed the amount of his deposit.

7. Method of Making Refunds. Refunds shall be paid to each depositor as they become entitled to a refund. The refund shall be made by mailing the refund to the depositor's last known address as shown on the books and records of the utility. Any refund distribution which cannot be returned to a depositor after the refund becomes due or after the ten year period lapses shall be transferred to the town general fund.

Sec. 12 - 5 – 2 Computation of Cost

The cost of each main extension made hereunder shall be computed by applying the actual average costs (not reflecting unusual costs incident to special construction) experienced by the utility during its preceding fiscal year plus or minus any amount necessary to adjust for known cost increases or decreases, respectively. Such cost computation shall be based on a six inch main, unless a larger main is reasonably necessary to serve the proposed customer or customers, including fire protection service; in which event the computation shall be made by applying the utility's actual average cost for the immediately preceding year of the main size and related facilities required, adjusted for known cost increases or decreases as above provided. In the absence of representative cost data for the previous year for any size or type of main or for any special construction incident to, or for any particular related facility involved in a main extension, the cost thereof as used for this purpose shall be the best estimate of the utility of the cost of such mains, special construction or related facilities based upon current available information, or shall be the actual costs, as determined by certified cost records provided by the applicants. If, for the utility's future extension plans, a larger main than is reasonably necessary for the service required from the main extension involved is installed, the difference in the cost of the larger pipe size and increased material and installation cost, if any, shall be borne by the utility.

Sec. 12 - 5 – 3 Other Basis of Extensions Permissible

This article shall not be construed as prohibiting any utility from making free extensions or from providing a method of return of deposits for extensions more favorable to customers or depositors so long as no discrimination is practiced among customers or depositors whose service requirements are similar.

Sec. 12 - 5 – 4 Responsibility of Town

The town accepts no responsibility for the extension of such mains until accepted upon completion by the town council.

Sec. 12 - 5 – 5 Right to Refuse Applications

The town reserves the right to refuse applications if the town makes the determination that the utility does not have sufficient capacity for additional hook-ups.

Article 12 – 6 USE OF PUBLIC SEWERS

- 12 - 6 - 1 Prohibited Substances
- 12 - 6 - 2 Interceptors Required
- 12 - 6 - 3 Authority of Sewer Department
- 12 - 6 - 4 Preliminary Treatment
- 12 - 6 - 5 Manholes
- 12 - 6 - 6 Tests and Analyses
- 12 - 6 - 7 Special Agreements with Industrial Concerns

Section 12 - 6 – 1 Prohibited Substances

- A. No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters to any sanitary sewer.
- B. Except as provided in this section no person shall discharge or cause to be discharged any of the following described waters or wastes into any public sewer:
1. Any liquid or vapor having a temperature higher than one hundred fifty degrees Fahrenheit.
 2. Any water or waste which may contain more than fifty parts per million by weight of fat, oil or grease.
 3. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas.
 4. Any garbage that has not been properly shredded.
 5. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, grits such as brick, cement, onyx, carbide or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewer works.
 6. Any waters or wastes having a pH lower than five and one-half or higher than nine or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works.
 7. Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals or create any hazard in the receiving waters of the sewage treatment plant.
 8. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant.
 9. Any noxious or malodorous gas or substance capable of creating a public nuisance.
 10. Any water or waste that has a phosphate limit of 10 parts per million.

Sec. 12 - 6 – 2 Interceptors Required

- A. Grease, oil and sand interceptors shall be provided when, in the opinion of the sewer department, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts or any flammable wastes, sand and other harmful ingredients except that such interceptors shall not be required for private living quarters or dwelling units.
- B. Grease and oil interceptors shall be constructed of impervious material capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight and equipped with easily removable covers which, when bolted in place, shall be gas tight and watertight.

- C. Where installed, all grease, oil and sand interceptors shall be maintained by the owner, at his/her expense, in continuously efficient operation at all times.

Sec. 12 - 6 – 3 Authority of Sewer Department

The admission into the public sewers of any waters or wastes having any of the following characteristics shall be subject to the review and approval of the sewer department:

- A. A five day biochemical oxygen demand (B.O.D.) greater than three hundred parts per million by weight.
- B. Containing more than three hundred fifty parts per million by weight of suspended solids.
- C. Containing any quantity of substance having the characteristics described in Section 12-6-1.
- D. Having an average daily flow of greater than two percent of the average daily sewage flow of the town.

Sec. 12 - 6 – 4 Preliminary Treatment

- A. Required. Where necessary in the opinion of the sewer department, the owner shall provide, at his/her expense, such preliminary treatment as may be necessary to:
 - 1. Reduce the B.O.D. to three hundred parts per million and the suspended solids to three hundred fifty parts per million by weight.
 - 2. Reduce objectionable characteristics or constituents to within the maximum limits provided for in Section 12-6-3.
 - 3. Control the quantities and rates of discharge of such waters or wastes.
- B. Approval. Plans, specifications and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for approval of the sewer department and the Arizona State Department of Health Services. No construction of such facilities shall be commenced until such approvals are obtained in writing.
- C. Maintenance of Facilities. Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his/her expense.

Sec. 12 - 6 – 5 Manholes

When required by the sewer department, the owner of any property served by a building sewer carrying industrial wastes shall install a suitable control manhole in the building sewer to facilitate observation and sampling of wastes. Such manhole, when required, shall be accessible and safely located and shall be constructed in accordance with plans approved by the sewer department. The manhole shall be installed by the owner at his/her expense and shall be maintained by him/her so as to be safe and accessible at all times.

Sec. 12 - 6 – 6 Tests and Analyses

All tests and analyses of the characteristics of waters and wastes, to which reference is made in Sections 12-6-1, 12-6-3 and 12-6-5, shall be determined in accordance with "standard methods for examination of water and sewage", and shall be determined at the control manhole provided for in Section 12-6-5 or upon suitable samples taken at such control manhole.

Sec. 12 - 6 – 7 Special Agreements with Industrial Concerns

No statement contained in this article shall be construed as preventing any special agreement or arrangement between the town and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the town for treatment, subject to payment therefor by the industrial concern.

Article 12 – 7 CONTROL OF BACKFLOW AND CROSS-CONNECTIONS

- 12 - 7 - 1 Purpose
- 12 - 7 - 2 Responsibility
- 12 - 7 - 3 Definitions
- 12 - 7 - 4 Administration
- 12 - 7 - 5 Requirements
- 12 - 7 - 6 Degree of Hazard
- 12 - 7 - 7 Permits
- 12 - 7 - 8 Existing In-Use Backflow Prevention Devices
- 12 - 7 - 9 Periodic Testing
- 12 - 7 - 10 Records and Reports
- 12 - 7 - 11 Fees and Charges

Section 12 - 7 – 1 Purpose

The purpose of this article is:

- A. To protect the public potable water supply, served by the Town of Patagonia Water Department, from possibility of contamination or pollution by isolating within its customers internal distribution system such contaminants or pollutants which could backflow or back-siphon into the public water system.
- B. To promote the elimination or control of existing cross-connections, actual or potential, between its customers in-plant potable water system and non-potable systems.
- D. To provide for the maintenance of a continuing program of cross-connection control which will effectively prevent the contamination or pollution of all potable water systems by cross-connection.

Sec. 12 - 7 – 2 Responsibility

The supervisor of the water department shall be responsible for the protection of the public potable water distribution system from the contamination or pollution due to the backflow or back-siphoning of contaminants or pollutants through the water service connection. If, in the judgment of the water supervisor, an approved backflow device is required at the town's water service connection to any customer's premises, the supervisor or his/her delegated agent shall

give notice in writing to said customer to install an approved backflow prevention device at each service connection to his/her premises. The customer shall within ninety days install such approved device, at his/her own expense, and failure or refusal, or inability on the part of the customer to install said device within ninety days, shall constitute grounds for discontinuing water service to the premises until such device has been properly installed.

Sec. 12 - 7 – 3 Definitions

In this article, unless the context otherwise requires:

- A. "Approved" means accepted by the water supervisor as meeting an applicable specification stated or cited in this article, or as suitable for the proposed use.
- B. "Auxiliary water supply" means any water supply, on or available, to the premises other than the purveyor's approved public potable water supply.
- C. "Backflow" means the flow of water or other liquids, mixtures or substances under positive or reduced pressure in the distribution pipes of a potable water supply from any source other than its intended source
- D. "Backflow preventer" means a device or means designed to prevent backflow or back-siphoning. Most commonly categorized as air gap, reduced pressure principle device, double check valve assembly, pressure vacuum breaker, atmospheric vacuum breaker, hose bib vacuum breaker, residential dual check, double check with intermediate atmospheric vent and barometric loop.
 - 1. "Air gap" means a physical separation sufficient to prevent backflow between the free-flowing discharge end of the potable water system and any other system. Physically defined as a distance equal to twice the diameter of the supply side pipe diameter but never less than one inch.
 - 2. "Atmospheric vacuum breaker" means a device which prevents back-siphoning by creating an atmospheric vent when there is either a negative pressure or sub-atmospheric pressure in a water system.
 - 3. "Barometric loop" means a fabricated piping arrangement rising at least thirty-five feet at its topmost point above the highest fixture it supplies. It is utilized in water supply systems to protect against back-siphoning.
 - 4. "Double check valve assembly" means an assembly of two independently operating spring loaded check valves with tightly closing shut-off valves on each side of the check valves plus properly located test cocks for the testing of each check valve.
 - 5. "Double check valve with intermediate atmospheric vent" means a device having two spring loaded check valves separated by an atmospheric vent chamber.
 - 6. "Hose bib vacuum breaker" means a device which is permanently attached to a hose bib and which acts as an atmospheric vacuum breaker.
 - 7. "Pressure vacuum breaker" means a device containing one or two independently operated spring loaded check valves and an independently operated spring loaded air inlet valve located on the discharge side of the check or checks. Device includes tightly

- closing shut-off valves on each side of the check valves and properly located test cocks for the testing of the check valve.
8. "Reduced pressure principle backflow preventer" means an assembly consisting of two independently operating approved check valves with an automatically operating differential relief valve located between the two check valves, tightly closing shut-off valves on each side of the check valves plus properly located test cocks for the testing of the check valves and the relief valve.
 9. "Residential dual check" means an assembly of two spring loaded independently operating check valves without tightly closing shut-off valves and test cocks. Generally employed immediately downstream of the water meter to act as a containment device.
- E. "Backpressure" means a condition in which the owners' system pressure is greater than the suppliers system pressure.
 - F. "Back-siphoning" means the flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply system from any source other than its intended source caused by the sudden reduction of pressure in the potable water supply system.
 - G. "Containment" means a method of backflow prevention which requires a back-flow prevention preventer at the water service entrance.
 - H. "Contaminant" means a substance that will impair the quality of the water to a degree that it creates a serious health hazard to the public leading to poisoning or the spread of disease.
 - I. "Cross-connection" means any actual or potential connection between the public water supply and a source of contamination or pollution.
 - J. "Department" means the Town of Patagonia Water Department.
 - K. "Fixture isolation" means a method of backflow prevention in which a backflow preventer is located to correct a cross-connection at an in-plant location rather than at a water service entrance.
 - L. "Owner" means any person who has legal title to, or license to, operate or habitat in a property upon which a cross-connection inspection is to be made or upon which a cross-connection is present.
 - M. "Permit" means a document issued by the department which allows the use of a backflow preventer.
 - N. "Person" means any individual, partnership, company, public or private corporation, political subdivision or agency of the state, agency or instrumentality of the United States or any other legal entity.
 - O. "Pollutant" means a foreign substance that if permitted to get into the public water system will degrade its quality so as to constitute a moderate 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 effect such water for domestic use.

- P. "Supervisor of the Town of Patagonia Water Service" means the supervisor or his/her delegated representative in charge of the Town of Patagonia Water Department. The supervisor or his/her delegated representative is invested with the authority and responsibility for the implementation of a cross-connection control program and for the enforcement of the provisions of this article.
- Q. "Water service entrance" means that point in the owners water system beyond the sanitary control of the district; generally considered to be the outlet end of the water meter and always before any unprotected branch.

Sec. 12 - 7 – 4 Administration

- A. The department will operate a cross-connection control program, to include the keeping of necessary records, which fulfills the requirements of the council's cross-connection regulations and is approved by the council.
- B. The owner shall allow his/her property to be inspected for possible cross- connections and shall follow the provisions of the department's program and the council's regulations if a cross-connection is permitted.
- C. If the department requires that the public supply be protected by containment, the owner shall be responsible for water quality beyond the outlet end of the containment device and should utilize fixture outlet protection for that purpose. The owner may utilize public health officials, personnel from the department or their delegated representatives to assist him/her in the survey of his/her facilities and to assist him/her in the selection of proper fixture outlet devices and the proper installation of these devices.

Sec. 12 - 7 – 5 Requirements

- A. Department requirements are:
1. On new installations, the department will provide on-site evaluation and/or inspection of plans in order to determine the type of backflow preventer, if any, that will be required, will issue permit and perform inspection. In any case, a minimum of a dual check valve will be required in any new construction, excluding residential, except where a hazard or potential hazard has been identified by the department.
 2. For premises existing prior to the start of this program, the department will perform evaluations and inspections of plans and/or premises and inform the owner by letter of any corrective action deemed necessary, the method of achieving the correction and the time allowed for the correction to be made. Ordinarily, ninety days will be allowed. However, this time period may be shortened depending upon the degree of hazard involved and the history of the device in question.
 3. The department will not allow any cross-connection to remain unless it is protected by an approved backflow preventer for which a permit has been issued and which will be regularly tested to insure satisfactory operation.
 4. The department shall inform the owner by letter of any failure to comply, by the time of the first re-inspection. The department will allow an additional fifteen days for the correction. In the event the owner fails to comply with the necessary correction by the

time of the second re-inspection, the department will inform the owner by letter that the water service to the owner's premises will be terminated within a period not to exceed five days. In the event that the owner informs the department of extenuating circumstances as to why the correction has not been made, a time extension may be granted by the department but in no case will exceed an additional thirty days.

5. If the department determines at any time that a serious threat to the public health exists, the water service will be terminated immediately.
6. All charges for these tests will be paid by the owner of the building or property. The owner must pay a private contractor who is a certified backflow device tester. The department shall have on file a list of private contractors who are certified backflow device testers.
7. The department will begin initial premise inspections to determine the nature of existing or potential hazards, following the approval of this program by the council, beginning with the 1993 calendar year. Initial focus will be on high hazard industries and commercial premise.
8. The department requires that all new retrofit installations of reduced pressure principle devices and double check valve backflow preventers include the installation of strainers located immediately upstream of the backflow device. The installation of strainers will preclude the fouling of backflow devices due to both foreseen and unforeseen circumstances occurring to the water supply system such as water main repairs, water main breaks, fires, periodic cleaning and flushing of mains, etc. These occurrences may "stir up" debris within the water main that will cause fouling of backflow devices installed without the benefit of strainers.

B. Owner requirements are:

1. The owner shall be responsible for the elimination or protection of all cross-connections on his/her premise.
2. The owner, after having been informed by a letter from the department, shall at his/her expense install, maintain, test, or have tested, any and all backflow preventers on his/her premises by a certified backflow device tester.
3. The owner shall correct any malfunction of the backflow preventer which is revealed by periodic testing.
4. The owner shall inform the department of any proposed or modified cross-connections and also any existing cross-connections of which the owner is aware but have not been found by the department.
5. The owner shall not install a by-pass around any backflow preventer unless there is a backflow preventer of the same type on the bypass. Owners who cannot shut down operation for testing of devices must supply additional devices necessary to allow testing to take place.
6. The owner shall install backflow preventers in a manner approved by the department.
7. The owner shall install only backflow preventers approved by the department.

8. Any owner having a private well or other private water source, must have a permit if the well or source is cross-connected to the department's system. Permission to cross-connect may be denied by the department. The owner may be required to install a backflow preventer at the service entrance if a private water source is maintained, even if it is not cross-connected to the department's system.
9. In the event the owner installs plumbing to provide potable water for domestic purposes which is on the department's side of the backflow preventer, such plumbing must have its own backflow preventer installed.
10. The owner shall be responsible for the payment of all fees for permits, annual or semi-annual device testing, repair or replacement, re-testing in the case that the device fails to operate correctly and second re-inspections for non-compliance with the department requirements.
11. Any owner of a new residential building will be required to install a residential dual check device immediately downstream of the water meter. Installation of this residential dual check device on a retrofit basis on existing service lines will be instituted at a time and at a potential cost to the homeowner as deemed necessary by the department. The owner must be aware that installation of a residential dual check valve results in a potential closed plumbing system within his/her residence. As such, provisions may have to be made by the owner to provide for thermal expansion within his/her closed loop system, i.e., the installation of thermal expansion devices and/or pressure relief valves.

Sec. 12 - 7 – 6 Degree of Hazard

The department recognizes the threat to the public water system arising from cross connections. All threats will be classified by degree of hazard and will require the installation of approved reduced pressure principle backflow prevention devices or double check valves.

Sec. 12 - 7 – 7 Permits

The department shall not permit a cross-connection within the public water supply system unless it is considered necessary and that it cannot be eliminated

- A. Cross-connection permits that are required for backflow prevention devices are obtained at the town clerk/treasurer's office. A fee of fifty dollars will be charged for the initial permit and twenty-five dollars for the renewal of each permit.
- B. Permits shall be renewed every three years and are non-transferable. Permits are subject to revocation and become immediately revoked if the owner should so change the type of cross-connection or degree of hazard associated with the service.
- C. A permit is not required when fixture isolation is achieved with the utilization of a non-testable backflow preventer.

Sec. 12 - 7 – 8 Existing In-Use Backflow Prevention Devices

Any existing backflow preventer shall be allowed by the department to continue service unless the degree of hazard is such as to supersede the effectiveness of the present backflow preventer, or result in an unreasonable risk to the public health. Where the degree of hazard has increased, as in the case of a residential installation converting to a business establishment,

any existing backflow preventer must be upgraded to a reduced pressure principle device, or a reduced pressure principle device must be installed in the event that no backflow device was present.

Sec. 12 - 7 – 9 Periodic Testing

- A. Reduced pressure principle backflow devices shall be tested and inspected at least annually. Periodic testing of all devices will conform to the frequency stated on the permit, not to exceed one year.
- B. Periodic testing shall be performed by an independent certified backflow device tester. This testing will be done at the owner's expense.
- C. The testing shall be conducted during the department's regular business hours. Exceptions to this, when at the request of the owner, may require additional charges to cover the increased costs to the department.
- D. Any backflow preventer which fails during a periodic test will be repaired or replaced. When repairs are necessary, upon completion of the repair the device will be re-tested at owner's expense to insure correct operation. High hazard situations will not be allowed to continue unprotected if the backflow preventer fails the second test and cannot be repaired immediately. In other situations, a compliance date of not more than thirty days after the test date will be established. The owner is responsible for spare parts, repair tools, any necessary replacement device and labor charges. Parallel installation of two devices is an effective means of the owner insuring uninterrupted water service during testing or repair of devices and is strongly recommended when the owner desires such continuity.
- E. Backflow prevention devices will be tested more frequently than specified in subsection A of this section in cases where there is a history of test failures and the department feels that, due to the degree of hazard involved, additional testing is warranted. Cost of the additional tests will be born by the owner.

Sec. 12 - 7 – 10 Records & Reports

A. Records

The Department will initiate and maintain the following:

- 1. Master files on customer cross-connection tests and inspections and installations, to include the date and location of such activity.
- 2. Master files on cross-connection permits.
- 3. Copies of permits and permit applications.
- 4. Copies of lists and summaries supplied to the council.

B. Reports

The department will submit the following to the council:

1. Initial listing of low hazard cross-connections to the state.
2. Initial listing of high hazard cross-connections to the state.
3. Annual update lists of items in paragraphs 1 and 2 of this subsection.
4. Annual summary of cross-connection inspections to the state.

Sec. 12 - 7 – 11 Fees and Charges

The council by resolution shall adopt a fee schedule for inspections of backflow installations performed by the Town.