

TITLE 18

WATER AND SEWERS¹

CHAPTER

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CHAPTER 1

WATER AND SEWERS

SECTION

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18-101. Application and scope. The provisions of this chapter are a part of all contracts for receiving water and sewer service from the municipality and shall apply whether the service is based upon contract, agreement, signed application, or otherwise. (1985 Code, § 13-101)

18-102. Definitions. (1) "Household" means any one (1) or more persons living together as a family or group.

(2) "Service line" shall consist of the pipe line extending from any water or sewer main of the municipality to private property.

(3) "Dwelling" means any single residential unit or house occupied for residential purposes. Each separate apartment unit, duplex unit or other multiple dwelling unit shall be considered a separate dwelling.

(4) "Premise" means any structure or group of structures operated as a single business or enterprise, provided, however, the term "premise" shall not include more than one (1) dwelling. (1985 Code, § 13-102, as amended by Ord. #088-016, Feb. 1988, modified)

18-103. Obtaining service. A formal request for either original or additional service must be made and be approved by the municipality before connection orders will be issued and work performed. An account activation fee of ten dollars (\$10.00) must accompany the request for service. (1985 Code, § 13-103)

18-104. Deposit required. For all new buildings and for any other buildings that become vacant, the person or persons who occupy such buildings and desire water and/or sewer service shall make a deposit of forty dollars (\$40.00) before receiving service. The deposit is to be refunded when the building is vacated if there is no outstanding debt owed for water and/or sewer service. If there is an outstanding debt, the deposit shall be applied to the debt and the balance, if any, shall be refunded to the person vacating the building.

The receipt of a prospective customer's application for service, regardless of whether or not accompanied by a deposit, shall not obligate the municipality to render the service applied for. If the service applied for cannot be supplied in accordance with the provisions of this chapter and general practice, the liability of the municipality to the applicant shall be limited to the return of any deposit made by such applicant. (1985 Code, § 13-104, as amended by Ord. #092-026, Nov. 1992)

18-105. Service charges for temporary service. Customers requiring temporary service shall pay all costs for connection and disconnection incidental to the supplying and removing of service in addition to the regular charge for water and/or sewer service. (1985 Code, § 13-105)

18-106. Connection charges. Service lines will be laid by the municipality from its mains to the property line at the expense of the applicant for service. The location of such lines will be determined by the municipality.

Before a new water or sewer service line will be installed by the municipality, the applicant shall pay a connection fee in accordance with the following schedule:

3/4" water tap	\$300.00
1" water tap	375.00 or actual cost plus 10%
1 & ½" water tap	465.00 whichever is greater
2" water tap	550.00 or actual cost plus 10%, whichever is greater
4" sewer tap	300.00
6" sewer tap	500.00 or actual cost plus 10%, whichever is greater

When a service line is completed, the municipality shall be responsible for the maintenance and upkeep of such service line from the main to the property line. The remaining portion of the service line beyond the property line shall belong to and be the responsibility of the customer. A water shut-off valve must be installed in either the customer's portion of the service line or within the plumbing system of the structure for use in case of an emergency. (1985 Code, § 13-106, as amended by Ord. #088-016, Feb. 1988, and Ord. #092-025, Nov. 1992)

18-107. Water and sewer main extensions. Persons desiring water and/or sewer main extensions must pay all of the cost of making such extensions.

For water main extensions cement-lined cast iron pipe, class 150 American Water Works Association Standards (or other construction approved by the governing body), not less than six (6) inches in diameter shall be used to the dead end of any line and to form loops or continuous lines, so that fire hydrants may be placed on such lines at locations no farther than 1,000 feet from the most distant part of any dwelling structure and no farther than 600 feet from the most distant part of any commercial, industrial, or public building, such measurements to be based on road or street distances. Cement-lined cast iron pipe (or other construction approved by the governing body) two (2) inches in diameter, to supply dwellings only, may be used to supplement such lines. For sewer main extensions eight-inch pipe of vitrified clay (or other construction approved by the governing body) shall be used.

All such extensions shall be installed either by municipal forces or by other forces working directly under the supervision of the municipality.

Upon completion of such extensions and their approval by the municipality, such water and/or sewer mains shall become the property of the municipality. The persons paying the cost of constructing such mains shall execute any written instruments requested by the municipality to provide evidence of the municipality's title to such mains. In consideration of such mains being transferred to it, the municipality shall incorporate said mains as an integral part of the municipal water and sewer systems and shall furnish water and sewer service therefrom in accordance with these rules and regulations, subject always to such limitations as may exist because of the size and elevation of the mains. (1985 Code, § 13-107)

18-108. Variances from and effect of preceding section as to extensions. Whenever the governing body is of the opinion that it is to the best interest of the municipality and its inhabitants to construct a water and/or sewer main extension without requiring strict compliance with the preceding section, such extension may be constructed upon such terms and conditions as shall be approved by the governing body.

The authority to make water and/or sewer main extensions under the preceding section is permissive only and nothing contained therein shall be construed as requiring the municipality to make such extensions or to furnish service to any person or persons. (1985 Code, § 13-108)

18-109. Multiple services through a single meter or service line.

(1) No customer shall supply water or sewer to more than one household or premise from a single service line without first obtaining the written permission of the municipality.

(2) Requirements for sewer and water to multiple units shall be as follows:

- (a) Water.
 - (i) All units must be plumbed separately.
 - (ii) All units must have own service line and meter.
 - (iii) Tap fee must be paid for each unit.
- (b) Sewer.
 - (i) Each unit must be plumbed separately.
 - (ii) All units may be consolidated in a main trunk line under the house and a cleanout at the beginning.
 - (iii) Up to 2 units may be consolidated in 4" line before entering main line with one tap fee.
 - (iv) Up to 4 units may be consolidated in 6" line before entering main line with one tap fee.
 - (v) Consolidated lines shall have cleanout a minimum of 4 feet from house.

(vi) Use schedule 40 or 160 pressure pipe only.

(vii) Minimum size line from house to street must be 4".

(3) The water and/or sewer charges for each such dwelling or premise thus served shall be computed as if each such dwelling or premise had received service through a separate service.

The separate charges for each dwelling or premise served through a single service line shall be added together, and the sum thereof shall be billed to the customer in whose name the service is supplied. (1985 Code, § 13-110, as amended by Ord. #088-015, Feb. 1988, and Ord. #090-021, Nov. 1990)

18-110. Billing. Bills for water and sewer will be due monthly.

Both charges shall be collected as a unit; no municipal employee shall accept payment of water service charges from any customer without receiving at the same time payment of all sewer service charges owed by such customer. Water service may be discontinued for non-payment of the combined bill.

Water and sewer bills must be paid on or before the 3rd day of the month. Bills not paid by the 3rd day of the month shall be subject to a five percent (5%) penalty.

In the event a bill is not paid on or before the 3rd day of the month, a written notice shall be mailed to the customer. The notice shall advise the customer that his service may be discontinued without further notice if bill is not paid by the 8th day of the month. The municipality shall not be liable for any damages resulting from discontinuing service under the provisions of this section, even though payment of the bill is made at the time on the day that service is actually discontinued.

Should the date of payment of a bill fall on Sunday or a holiday, the business day next following the date shall be the payment date. A remittance received by mail after the time limit for payment will be accepted by the municipality if the envelope is date-stamped on or before the payment date. (1985 Code, § 13-111, as amended by Ord. #09-024, Oct. 1991)

18-111. Discontinuance or refusal of service. The city shall have the right to discontinue water and sewer service or to refuse to connect service for a violation of, or a failure to comply with, any of the following:

- (1) These rules and regulations, including the nonpayment of bills.
- (2) The customer's application for service.
- (3) The customer's contract for service.
- (4) The non payment of bills.
- (5) The failure to repair a leaking water service and/or plumbing.

The right to discontinue service shall apply to all service received through a single connection or service, even though more than one (1) customer or tenant

is furnished service therefrom, and even though the delinquency or violation is limited to only one such customer or tenant.

Discontinuance of service by the municipality for any cause stated in these rules and regulations shall not release the customer from liability for service already received or from liability for payments that thereafter become due under other provisions of the customer's contract.

No service shall be discontinued unless the customer is given reasonable notice in advance of such impending action and the reason therefor. The customer shall also be notified of his right to a hearing prior to such disconnection if he disputes the reason therefor and requests such hearing by the date specified in the notice. When a hearing is requested, the customer shall have the right to have a representative at such hearing and shall be entitled to testify and to present witnesses on his behalf. Also, when such hearing has been requested, the customer's service shall not be terminated until a final decision is reached by the hearing officer and the customer is notified of that decision. (1985 Code, § 13-112, as amended by Ord. #088-016, Feb. 1988)

18-112. Reconnection charge. Whenever service has been discontinued as provided for above, a reconnection charge of ten dollars (\$10.00) shall be collected by the municipality before service is restored. (1986 Code, § 13-113)

18-113. Termination of service by customer. Customers who have fulfilled their contract terms and wish to discontinue service must give at least three (3) days written notice to that effect unless the contract specifies otherwise. Notice to discontinue service prior to the expiration of a contract term will not relieve the customer from any minimum or guaranteed payment under such contract or applicable rate schedule.

When service is being furnished to an occupant of premises under a contract not in the occupant's name, the municipality reserves the right to impose the following conditions on the right of the customer to discontinue service under such a contract:

(1) Written notice of the customer's desire for such service to be discontinued may be required; and the municipality shall have the right to continue such service for a period of not to exceed ten (10) days after receipt of such written notice, during which time the customer shall be responsible for all charges for such service. If the municipality should continue service after such ten (10) day period subsequent to the receipt of the customer's written notice to discontinue service, the customer shall not be responsible for charges for any service furnished after the expiration of the ten (10) day period.

(2) During the ten (10) day period, the occupant of premises to which service has been ordered discontinued by a customer other than such occupant, may be allowed by the municipality to enter into a contract for service in the

occupant's own name upon the occupant's complying with these rules and regulations with respect to a new application for service. (1985 Code, § 13-114)

18-114. Access to customers' premises. The municipality's identified representatives and employees shall be granted access to all customers' premises at all reasonable times for testing, inspecting, repairing, removing, and replacing all equipment belonging to the municipality, and for inspecting customers' plumbing and premises generally in order to secure compliance with these rules and regulations. (1985 Code, § 13-115)

18-115. Inspections. The municipality shall have the right, but shall not be obligated, to inspect any installation or plumbing system before water and/or sewer service is furnished or at any later time. The municipality reserves the right to refuse service or to discontinue service to any premises not meeting standards established by the municipality, or not in accordance with any special contract, these rules and regulations, or other requirements of the municipality.

Any failure to inspect or reject a customer's installation or plumbing system shall not render the municipality liable or responsible for any loss or damage which might have been avoided had such inspection or rejection been made. (1985 Code, § 13-116)

18-116. Customer's responsibility for system's property. Except as herein elsewhere expressly provided, all service connections, and other equipment furnished by or for the municipality shall be and remain the property of the municipality. Each customer shall provide space for and exercise proper care to protect the property of the municipality on his premises. In the event of loss or damage to such property arising from the neglect of a customer to care for it properly, the cost of necessary repairs or replacements shall be paid by the customer. (1985 Code, § 13-117)

18-117. Customer's responsibility for violations. Where the municipality furnishes water and/or sewer service to a customer, such customer shall be responsible for all violations of these rules and regulations which occur on the premises so served. Personal participation by the customer in any such violations shall not be necessary to impose such personal responsibility on him. (1985 Code, § 13-118)

18-118. Supply and resale of water. All water shall be supplied within the municipality exclusively by the municipality, and no customer shall, directly or indirectly, sell, sublet, assign, or otherwise dispose of the water or any part thereof except with written permission from the municipality. (1985 Code, § 13-119)

18-119. Unauthorized use of or interference with water supply. No person shall turn on or turn off any of the municipality's stop cocks, valves, hydrants, spigots, or fire plugs without permission or authority from the municipality. All curb stops shall be locked when not in active use. (1985 Code, § 13-120)

18-120. Limited use of unmetered private fire line. Where a private fire line is not metered, no water shall be used from such line or from any fire hydrant thereon, except to fight fire or except when being inspected in the presence of an authorized agent of the municipality.

All private fire hydrants shall be sealed by the municipality, and shall be inspected at regular intervals to see that they are in proper condition and that no water is being used therefrom in violation of these rules and regulations. When the seal is broken on account of fire, or for any other reason, the customer taking such service shall immediately give the municipality a written notice of such occurrence. (1985 Code, § 13-121)

18-121. Damages to property due to water pressure. The municipality shall not be liable to any customer for damages caused to his plumbing or property by high pressure, low pressure, or fluctuations in pressure in the municipality's water mains. (1985 Code, § 13-122)

18-122. Liability for cutoff failures. The municipality's liability shall be limited to the forfeiture of the right to charge a customer for water that is not used but is received from a service line under any of the following circumstances:

(1) After receipt of at least ten (10) days' written notice to cut off water service, the municipality has failed to cut off such service.

(2) The municipality has attempted to cut off a service but such service has not been completely cut off.

(3) The municipality has completely cut off a service but subsequently the cutoff develops a leak or is turned on again so that water enters the customer's pipes from the municipality's main.

Except to the extent stated above, the municipality shall not be liable for any loss or damage resulting from cutoff failures. If a customer wishes to avoid possible damage for cutoff failures, the customer shall rely exclusively on privately owned cutoffs and not on the municipality's cutoff. Also, the customer (and not the municipality) shall be responsible for seeing that his plumbing is properly drained and is kept properly drained, after his water service has been cut off. (1985 Code, § 13-123)

18-123. Restricted use of water. In times of emergencies or in times of water shortage, the municipality reserves the right to restrict the purposes for which water may be used by a customer and the amount of water which a customer may use. (1985 Code, § 13-124)

18-124. Interruption of service. The municipality will endeavor to furnish continuous water and sewer service, but does not guarantee to the customer any fixed pressure or continuous service. The municipality shall not be liable for any damages for any interruption of service whatsoever.

In connection with the operation, maintenance, repair, and extension of the municipal water and sewer systems, the water supply may be shut off without notice when necessary or desirable, and each customer must be prepared for such emergencies. The municipality shall not be liable for any damages from such interruption of service or for damages from the resumption of service without notice after any such interruption. (1985 Code, § 13-125)

18-125. Schedule of rates. All water and sewer service shall be furnished under such rate schedules as the municipality may from time to time adopt by appropriate ordinance or resolution.¹ (1985 Code, § 13-109)

¹Administrative ordinances and regulations are of record in the office of the city recorder.

CHAPTER 2

SUPPLEMENTARY SEWER REGULATIONS

SECTION

- 18-201. Definitions.
- 18-202. Use of public sewers required.
- 18-203. Private sewage disposal.
- 18-204. Building sewers and connections.
- 18-205. Use of the public sewers.
- 18-206. Protection from damage.
- 18-207. Powers and authority of inspectors.
- 18-208. Violations.

18-201. Definitions. Unless the context specifically indicates otherwise, the meaning of terms used in this chapter shall be as follows:

(1) "BOD" (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20°C. expressed in milligrams per liter.

(2) "Building drain" shall mean that part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five (5) feet (1.5 meters) outside the inner face of the building wall.

(3) "Building sewer" shall mean the extension from the building drain to the public sewer or other place of disposal.

(4) "Combined sewer" shall mean a sewer receiving both surface runoff and sewage.

(5) "Garbage" shall mean solid wastes from the domestic and commercial preparation, cooking, and dispensing of food, and from the handling, storage, and sale of produce.

(6) "Industrial wastes" shall mean the liquid wastes from industrial manufacturing processes, trade, or business as distinct from sanitary sewage.

(7) "Natural outlet" shall mean any outlet into a watercourse, pond, ditch, lake, or other body of surface or groundwater.

(8) "Person" shall mean any individual, firm, company, association, society, corporation, or group.

(9) "pH" shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

(10) "Properly shredded garbage" shall mean the wastes from the preparation, cooking, and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (½) inch (1.27 centimeters) in any dimension.

(11) "Public sewer" shall mean a sewer in which all owners of abutting properties have equal rights, and controlled by public authority.

(12) "Sanitary sewer" shall mean a sewer which carries sewage and to which storm, surface, and groundwaters are not intentionally admitted.

(13) "Sewage" shall mean a combination of the watercarried wastes from residences, business buildings, institutions and industrial establishments, together with such ground, surface, and stormwaters as may be present.

(14) "Sewage treatment plant" shall mean any arrangement of devices and structures used for treating sewage.

(15) "Sewage works" shall mean all facilities for collecting, pumping, treating, and disposing of sewage.

(16) "Sewer" shall mean a pipe or conduit for carrying sewage.

(17) "Shall" is mandatory; "may" is permissive.

(18) "Slug" shall mean any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration of flows during normal operation.

(19) "Storm drain" (sometimes termed "storm sewer") shall mean a sewer which carries storm and surface waters and drainage, but excludes sewage and industrial wastes, other than unpolluted cooling water.

(20) "Superintendent" shall mean the superintendent of sewage works and/or of water pollution control of the municipality, or his authorized deputy, agent, or representative.

(21) "Suspended solids" shall mean solids that are in suspension in water, sewage, or other liquids, and which are removable by laboratory filtering.

(22) "Watercourse" shall mean a channel in which a flow of water occurs, either continuously or intermittently. (1985 Code, § 13-201)

18-202. Use of public sewers required. (1) It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within the municipality, or in any area under its jurisdiction, any human or animal excrement, garbage, or other objectionable waste.

(2) It shall be unlawful to discharge to any natural outlet within the municipality, or in any area under its jurisdiction, any sewage or other polluted

waters, except where suitable treatment has been provided in accordance with subsequent provisions of this chapter.

(3) Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of sewage.

(4) The owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the municipality and abutting on any street, alley or right-of-way in which there is now located or may in the future be located a public sanitary or combined sewer of the municipality, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this chapter, within ninety (90) days after date of official notice to do so, provided that said public sewer is within two hundred (200) feet of the property line. (1985 Code, § 13-202)

18-203. Private sewage disposal. The disposal of sewage by means other than the use of the sanitary sewage system shall be in accordance with local and state laws. The disposal of sewage by private disposal systems shall be permissible only in those instances where service from the sanitary sewage system is not available. (1985 Code, § 13-203)

18-204. Building sewers and connections. (1) No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the superintendent.

(2) There shall be two (2) classes of building sewer permits:

(a) For residential and commercial service, and

(b) For service to establishments producing industrial wastes.

In either case, the owner or his agent shall make application on a special form furnished by the municipality. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the superintendent.

(3) All costs and expenses incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the municipality from any loss or drainage that may directly or indirectly be occasioned by the installation of the building sewer.

(4) A separate and independent building sewer shall be provided for every building; except where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, courtyard, or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.

(5) Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the superintendent, to meet all requirements of this chapter.

(6) The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling the trench, shall all conform to applicable rules and regulations of the municipality. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the A.S.T.M. and W.P.C.F. Manual of Practice No. 9 shall apply.

(7) Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.

(8) No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.

(9) The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the municipality, or the procedures set forth in appropriate specifications of the A.S.T.M. and W.P.C.F. Manual of Practice No. 9. Any deviation from the prescribed procedures and materials must be approved by the superintendent before installation.

(10) The applicant for the building sewer permit shall notify the superintendent when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the superintendent or his representative.

(11) All excavations for building sewer installations shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the municipality . (1985 Code, § 13-204)

18-205. Use of the public sewers. (1) No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process water to any sanitary sewer.

(2) Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers, or to a natural outlet approved by the Tennessee Stream Pollution Control Board. Industrial cooling water or unpolluted process waters may be discharged, on approval of

the Tennessee Stream Pollution Control Board, to a storm sewer, or natural outlet.

(3) No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

(a) Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid or gas.

(b) Any waters or wastes containing toxic or poisonous solids, liquids, or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the sewage treatment plant.

(c) Any waters or wastes having a pH lower than 5.5, or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sewage works.

(d) Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the sewage works such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails and paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.

(4) No person shall discharge or cause to be discharged the following described substances, materials, waters, or wastes if it appears likely in the opinion of the superintendent that such wastes can harm either the sewers, sewage treatment process, or equipment, have an adverse effect on the receiving stream, or can otherwise endanger life, limb, public property, or constitute a nuisance. In forming his opinion as to the acceptability of these wastes, the superintendent will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant, and other pertinent factors. The substances prohibited are:

(a) Any liquid or vapor having a temperature higher than one hundred fifty (150)° F (65°C).

(b) Any water or waste containing fats, wax, grease, or oils, whether or not emulsified, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty-two (32) and one hundred fifty (150)° F (0 and 65°C).

(c) Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor

of three-fourths (3/4) horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the superintendent.

(d) Any waters or wastes containing strong acid from pickling wastes, or concentrated plating solutions whether neutralized or not.

(e) Any waters or wastes containing iron, chromium, copper, zinc, cyanide, and similar objectionable or toxic substances; or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage treatment works exceeds the limits established by the superintendent and/or the Division of Sanitary Engineering, Tennessee Department of Health, for such materials.

(f) Any waters or wastes containing phenols or other taste- or odor-producing substances, in such concentrations exceeding limits which may be established by the superintendent as necessary, after treatment of the composite sewage, to meet the requirements of the state, federal, or other public agencies of jurisdiction for such discharge to the receiving waters.

(g) Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established the superintendent in compliance with applicable state or federal regulations.

(h) Any waters or wastes having a pH in excess of 9.5.

(i) Materials which exert or cause:

(i) Unusual concentrations of inert suspended solids (such as, but not limited to, Fullers earth, lime slurries, and lime residues) or of dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate),

(ii) Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions).

(iii) Unusual BOD (above 300 mg/l), chemical oxygen demand, or chlorine requirement in such quantities as to constitute a significant load on the sewage treatment works.

(iv) Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein.

(j) Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed, or are amenable to treatment only to such degree that the sewage treatment plant affluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

(k) Waters or wastes containing suspended solids in excess of 300 mg/l.

(5) If any waters or wastes are discharged, or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in subsection (4) of this section, and which in the judgment of the superintendent and/or the Division of Sanitary Engineering, Tennessee Department of Health, may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the superintendent may:

- (a) Reject the wastes;
- (b) Require pretreatment to an acceptable condition for discharge to the public sewers;
- (c) Require control over the quantities and rates of discharge; and/or
- (d) Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges under the provisions of subsection (10) of this section.

If the superintendent permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the superintendent, and the Tennessee Department of Health, and subject to the requirements of all applicable codes, ordinances, and laws.

(6) Grease, oil, and sand interceptors shall be provided when, in the opinion of the superintendent, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the superintendent, and shall be so located as to be readily and easily accessible for cleaning and inspection.

(7) Where preliminary treatment or flow-equalizing facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

(8) When required by the superintendent, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole together with such necessary meters and other appurtenances in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the superintendent. The manhole shall be installed by the owner at his expense and shall be maintained by him so as to be safe and accessible at all times.

(9) All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this chapter shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater," published by the American Public

Health Association and shall be determined at the control manhole provided, or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituent upon the sewage works and to determine the existence of hazards to life, limb, and property. (The particular analysis involved will determine whether a twenty-four (24) hour composite of all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from 24-hr. composites of all outfalls whereas pH's are obtained from periodic grab samples.)

(10) No statement contained in this section shall be construed as preventing any special agreement or arrangement between the municipality and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the municipality for treatment, subject to payment therefor, by the industrial concern. (1985 Code, § 13-205)

18-206. Protection from damage. No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is a part of the sewage works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct. (1985 Code, § 13-206)

18-207. Powers and authority of inspectors. (1) The superintendent and other duly authorized employees of the municipality bearing proper credentials and identification shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling, and testing in accordance with the provisions of this chapter. The superintendent or his representatives shall have no authority to inquire into any processes including metallurgical, chemical, oil, refining, ceramic, paper, or other industries beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterways or facilities for waste treatment.

(2) While performing the necessary work on private properties referred to in subsection (1) of this section, the superintendent or duly authorized employees of the municipality shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the municipal employees and the municipality shall indemnify the company against loss or damage to its property by municipality employees and against liability claims and demands for personal injury or property damages asserted against the company and growing out of the gauging

and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions as required in § 18-205(8).

(3) The superintendent and other duly authorized employees of the municipality bearing proper credentials and identification shall be permitted to enter all private properties through which the municipality holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair, and maintenance of any portion of the sewage works lying within said easement. All entry and subsequent work, if any, on said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved. (1985 Code, § 13-207)

18-208. Violations. (1) Any person found to be violating any provision of this chapter except § 18-206 shall be served by the municipality with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

(2) Any person who shall continue any violation beyond the time limit provided for in subsection (1) of this section shall be guilty of a misdemeanor, and on conviction thereof shall be fined under the general penalty clause for this municipal code of ordinances.

(3) Any person violating any of the provisions of this chapter shall become liable to the municipality for any expense, loss, or damage occasioned the municipality by reason of such violation. (1985 Code, § 13-208)

CHAPTER 3

SEWAGE AND HUMAN EXCRETA DISPOSAL¹

SECTION

- 18-301. Definitions.
- 18-302. Places required to have sanitary disposal methods.
- 18-303. When a connection to the public sewer is required.
- 18-304. When a septic tank shall be used.
- 18-305. Registration and records of septic tank cleaners, etc.
- 18-306. Use of pit privy or other method of disposal.
- 18-307. Approval and permit required for septic tanks, privies, etc.
- 18-308. Owner to provide disposal facilities.
- 18-309. Occupant to maintain disposal facilities.
- 18-310. Only specified methods of disposal to be used.
- 18-311. Discharge into watercourses restricted.
- 18-312. Pollution of ground water prohibited.
- 18-313. Enforcement of chapter.
- 18-314. Carnivals, circuses, etc.
- 18-315. Violations.

18-301. Definitions. The following definitions shall apply in the interpretation of this chapter:

(1) "Accessible sewer." A public sanitary sewer located in a street or alley abutting on the property in question or otherwise within two hundred (200) feet of any boundary of said property measured along the shortest available right-of-way;

(2) "Health officer." The person duly appointed to such position having jurisdiction, or any person or persons authorized to act as his agent;

(3) "Human excreta." The bowel and kidney discharges of human beings;

(4) "Sewage." All water-carried human and household wastes from residences, buildings, or industrial establishments;

(5) "Approved septic tank system." A watertight covered receptacle of monolithic concrete, either precast or cast in place, constructed according to plans approved by the health officer. Such tanks shall have a capacity of not less than 750 gallons and in the case of homes with more than two (2) bedrooms the capacity of the tank shall be in accordance with the recommendations of the Tennessee Department of Public Health as provided for in its 1967 bulletin

¹Municipal code reference

Plumbing code: title 12, chapter 2.

entitled "Recommended Guide for Location, Design, and Construction of Septic Tanks and Disposal Fields." A minimum liquid depth of four (4) feet should be provided with a minimum depth of air space above the liquid of one (1) foot. The septic tank dimensions should be such that the length from inlet to outlet is at least twice but not more than three (3) times the width. The liquid depth should not exceed five (5) feet. The discharge from the septic tank shall be disposed of in such a manner that it may not create a nuisance on the surface of the ground or pollute the underground water supply, and such disposal shall be in accordance with recommendation of the health officer as determined by acceptable soil percolation data;

(6) "Sanitary pit privy." A privy having a fly-tight floor and seat over an excavation in earth, located and constructed in such a manner that flies and animals will be excluded, surface water may not enter the pit, and danger of pollution of the surface of the ground or the underground water supply will be prevented;

(7) "Other approved method of sewage disposal." Any privy, chemical toilet, or other toilet device (other than a sanitary sewer, septic tank, or sanitary pit privy as described above) the type, location, and construction of which have been approved by the health officer;

(8) "Watercourse." Any natural or artificial drain which conveys water either continuously or intermittently. (1985 Code, § 8-301)

18-302. Places required to have sanitary disposal methods. Every residence, building, or place where human beings reside, assemble, or are employed within the corporate limits shall be required to have a sanitary method for disposal of sewage and human excreta. (1985 Code, § 8-302)

18-303. When a connection to the public sewer is required. Wherever an accessible sewer exists and water under pressure is available, approved plumbing facilities shall be provided and the wastes from such facilities shall be discharged through a connection to said sewer made in compliance with the requirements of the official responsible for the public sewerage system. On any lot or premise accessible to the sewer no other method of sewage disposal shall be employed. (1985 Code, § 8-303)

18-304. When a septic tank shall be used. Wherever water-carried sewage facilities are installed and their use is permitted by the health officer, and an accessible sewer does not exist, the wastes from such facilities shall be discharged into an approved septic tank system.

No septic tank or other water-carried sewage disposal system except a connection to a public sewer shall be installed without the approval of the health officer or his duly appointed representative. The design, layout, and

construction of such systems shall be in accordance with specifications approved by the health officer and the installation shall be under the general supervision of the department of health. (1985 Code, § 8-304)

18-305. Registration and records of septic tank cleaners, etc. Every person, firm, or corporation who operates equipment for the purpose of removing digested sludge from septic tanks, cesspools, privies, and other sewage disposal installations on private or public property must register with the health officer and furnish such records of work done within the corporate limits as may be deemed necessary by the health officer. (1985 Code, § 8-305)

18-306. Use of pit privy or other method of disposal. Wherever a sanitary method of human excreta disposal is required under § 18-302 and water-carried sewage facilities are not used, a sanitary pit privy or other approved method of disposal shall be provided. (1985 Code, § 8-306)

18-307. Approval and permit required for septic tanks, privies, etc. Any person, firm, or corporation proposing to construct a septic tank system, privy, or other sewage disposal facility, requiring the approval of the health officer under this chapter, shall before the initiation of construction obtain the approval of the health officer for the design and location of the system and secure a permit from the health officer for such system. (1985 Code, § 8-307)

18-308. Owner to provide disposal facilities. It shall be the duty of the owner of any property upon which facilities for sanitary sewage or human excreta disposal are required by § 18-302, or the agent of the owner to provide such facilities. (1985 Code, § 8-308)

18-309. Occupant to maintain disposal facilities. It shall be the duty of the occupant, tenant, lessee, or other person in charge to maintain the facilities for sewage disposal in a clean and sanitary condition at all times and no refuse or other material which may unduly fill up, clog, or otherwise interfere with the operation of such facilities shall be deposited therein. (1985 Code, § 8-309)

18-310. Only specified methods of disposal to be used. No sewage or human excreta shall be thrown out, deposited, buried, or otherwise disposed of except by a sanitary method of disposal as specified in this chapter. (1985 Code, § 8-310)

18-311. Discharge into watercourses restricted. No sewage or excreta shall be discharged or deposited into any lake or watercourse except under

conditions specified by the health officer and specifically authorized by the Tennessee Stream Pollution Control Board. (1985 Code, § 8-311)

18-312. Pollution of ground water prohibited. No sewage effluent from a septic tank, sewage treatment plant, or discharges from any plumbing facility shall empty into any well, cistern, sinkhole, crevice, ditch, or other opening, either natural or artificial in any formation which may permit the pollution of ground water. (1985 Code, § 8-312)

18-313. Enforcement of chapter. It shall be the duty of the health officer to make an inspection of the methods of disposal of sewage and human excreta as often as is considered necessary to insure full compliance with the terms of this chapter. Written notification of any violation shall be given by the health officer to the person or persons responsible for the correction of the condition, and correction shall be made within forty-five (45) days after notification. If the health officer shall advise any person that the method by which human excreta and sewage is being disposed of constitutes an immediate and serious menace to health, such person shall at once take steps to remove the menace. Failure to remove such menace immediately shall be punishable under the general penalty clause for this code. However, such person shall be allowed the number of days herein provided within which to make permanent correction. (1985 Code, § 8-313)

18-314. Carnivals, circuses, etc. Whenever carnivals, circuses, or other transient groups of persons come within the corporate limits such groups of transients shall provide a sanitary method for disposal of sewage and human excreta. Failure of a carnival, circus, or other transient group to provide such sanitary method of disposal and to make all reasonable changes and corrections proposed by the health officer shall constitute a violation of this section. In these cases the violator shall not be entitled to the notice of forty-five (45) days provided for in the preceding section. (1985 Code, § 8-314)

18-315. Violations. Any person, persons, firm, association, or corporation or agent thereof, who shall fail, neglect, or refuse to comply with the provisions of this chapter shall be deemed guilty of a misdemeanor and shall be punishable under the general penalty clause for this code. (1985 Code, § 8-315)

CHAPTER 4

CROSS CONNECTION ORDINANCE¹

SECTION

- 18-401. Purpose.
- 18-402. Objectives.
- 18-403. Definitions.
- 18-404. Compliance with Tennessee Code Annotated.
- 18-405. Regulated.
- 18-406. New installations.
- 18-407. Existing installations.
- 18-408. Inspections.
- 18-409. Right of entry for inspections.
- 18-410. Correction of violations.
- 18-411. Required devices.
- 18-412. Nonpotable supplies.
- 18-413. Statement required.
- 18-414. Penalty; discontinuance of water supply.
- 18-415. Provision applicable.

18-401. Purpose. This ordinance sets forth uniform requirements for the protection of the public water system for the Gleason Water System from possible contamination, and enable the Gleason Water System to comply with all applicable local, state and federal laws, regulations, standards or requirements, including the Safe Drinking Water Act of 1996, Tennessee Code Annotated, §§ 68-221-701 to 68-221-720, and the Rules and Regulations for Public Water Systems and Drinking Water Quality issued by the Tennessee Department of Environment and Conservation, Division of Water Supply. (Ord. #003-060, Feb. 2003)

18-402. Objectives. The objectives of this ordinance are to:

(1) Protect the potable water system of Gleason Water System from the possibility of contamination or pollution by isolating within the customer's internal distribution system, such contaminants or pollutants that could backflow or backsiphon into the public water system;

¹Municipal code references

Plumbing code: title 12.

Water and sewer system administration: title 18.

Wastewater treatment: title 18.

(2) Promote the elimination or control of existing cross connections, actual or potential, between the customer's in-house potable water system and non-potable water systems, plumbing fixtures, and industrial piping systems;

(3) Provide for the maintenance of a continuing program of cross connection control that will systematically and effectively prevent the contamination or pollution of all potable water systems. (Ord. #003-060, Feb. 2003)

18-403. Definitions. The following words, terms and phrases shall have the meanings ascribed to them in this section, when used in the interpretation and enforcement of this chapter:

(1) "Air-gap" shall mean a vertical, physical separation between a water supply and the overflow rim of a non-pressurized receiving vessel. An approved air-gap separation shall be at least twice the inside diameter of the water supply line, but in no case less than two (2) inches. Where a discharge line serves as receiver, the air-gap shall be at least twice the diameter of the discharge line, but not less than two (2) inches.

(2) "Atmospheric vacuum breaker" shall mean a device which prevents backsiphonage by creating an atmospheric vent when there is either a negative pressure or sub-atmospheric pressure in the water system.

(3) "Auxiliary intake" shall mean any water supply, on or available to a premises, other than that directly supplied by the public water system. These auxiliary waters may include water from another purveyor's public water system; any natural source, such as a well, spring, river, stream, and so forth; used, reclaimed or recycled waters; or industrial fluids.

(4) "Backflow" shall mean the undesirable reversal of the intended direction of flow in a potable water distribution system as a result of a cross connection.

(5) "Backpressure" shall mean any elevation of pressure in the downstream piping system (caused by pump, elevated tank or piping, steam and/or air pressure) above the water supply pressure at the point which would cause, or tend to cause, a reversal of the normal direction of flow.

(6) "Backsiphonage" shall mean the flow of water or other liquids, mixtures or substances into the potable water system from any source other than its intended source, caused by the reduction of pressure in the potable water system.

(7) "Bypass" shall mean any system of piping or other arrangement whereby water from the public water system can be diverted around a backflow prevention device.

(8) "Cross connection" shall mean any physical connection or potential connection whereby the public water system is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage

reservoir, plumbing fixture or other waste or liquid of unknown or unsafe quality, which may be capable of imparting contamination to the public water system as a result of backflow or backsiphonage. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices, through which or because of which backflow could occur, are considered to be cross connections.

(9) "Double check valve assembly" shall mean an assembly of two (2) independently operating, approved check valves with tightly closing resilient shut-off valves on each side of the check valves, fitted with properly located resilient seated test cocks for testing each check valve.

(10) "Double check detector assembly" shall mean an assembly of two (2) independently operating, approved check valves with an approved water meter (protected by another double check valve assembly) connected across the check valves, with tightly closing resilient seated shut-off valves on each side of the check valves, fitted with properly located resilient test cocks for testing each part of the assembly.

(11) "Fire protection systems" shall be classified in six different classes in accordance with AAWWA Manual M14 - Second Edition 1990. The six classes are as follows:

(a) Class 1 shall be those with direct connections from public water mains only, no pumps, tanks or reservoirs; no physical connection from other water supplies; no antifreeze or other additives of any kind; all sprinkler drains discharging to the atmosphere, dry wells or other safe outlets.

(b) Class 2 shall be the same as Class 1, except that booster pumps may be installed in the connections from the street mains.

(c) Class 3 shall be those with direct connection from public water supply mains, plus one or more of the following: elevated storage tanks, fire pumps taking suction from above ground covered reservoirs or tanks, and/or pressure tanks (all storage facilities are filled from or connected to public water only, and the water in the tanks is to be maintained in a potable condition).

(d) Class 4 shall be those with direct connection from the public water supply mains, similar to Class 1 and Class 2, with an auxiliary water supply dedicated to fire department use and available to the premises, such as an auxiliary supply located within 1700 ft. of the pumper connection.

(e) Class 5 shall be those directly supplied from public water mains and interconnected with auxiliary supplies, such as pumps taking suction from reservoirs exposed to contamination, or rivers and ponds; driven wells; mills or other industrial water systems, or where antifreeze or other additives are used.

(f) Class 6 shall be those with combined industrial and fire protection systems supplied from the public water mains only, with or without gravity storage or pump suction tanks.

(12) "Interconnection" shall mean any system of piping or other arrangements whereby the public water supply is connected directly with a sewer, drain, conduit, pool, storage reservoir, or other device which does or may contain sewage or other waste or liquid which would be capable of imparting contamination to the public water system.

(13) "Person" shall mean any and all persons, natural or artificial, including any individual, firm or association, and any municipal or private corporation organized or existing under the laws of this or any other state or country.

(14) "Potable water" shall mean water, which meets the criteria of the Tennessee Department of Environment and Conservation and the United States Environmental Protection Agency for human consumption.

(15) "Pressure vacuum breaker" shall mean an assembly consisting of a device containing one (1) or two (2) independently operating spring loaded check valves and an independently operating spring loaded air inlet valve located on the discharge side of the check valve(s), with tightly closing shut-off valves on each side of the check valves and properly located test cocks for the testing of the check valves and relief valve.

(16) "Public water supply" shall mean the Gleason Water System which furnishes potable water to the public for general use and which is recognized as the public water supply by the Tennessee Department of Environment and Conservation.

(17) "Reduced pressure principal backflow prevention device" shall mean an assembly consisting of two (2) independently operating approved check valves with an automatically operating differential relief valve located between the two check valves, tightly closing resilient seated shut-off valves, plus properly located resilient seated test cocks for the testing of the check valves and the relief valve.

(18) "Manager" shall mean the Manager of the Gleason Water System or his duly authorized deputy, agent or representative.

(19) "Water system" shall be considered as made up of two (2) parts, the utility system and the customer system.

(a) The "utility system" shall consist of the facilities for the storage and distribution of water and shall include all those facilities of the water system under the complete control of the utility system, up to the point where the customer's system begins (i.e. the water meter);

(b) The "customer system" shall include those parts of the facilities beyond the termination of the utility system distribution system

that are utilized in conveying domestic water to points of use.
(Ord. #003-060, Feb. 2003)

18-404. Compliance with Tennessee Code Annotated. The Gleason Water System shall be responsible for the protection of the public water system from contamination or pollution due to the backflow of contaminants through the water service connection. The Gleason Water System shall comply with Tennessee Code Annotated, § 68-221-711, as well as the Rules and Regulations for Public Water Systems and Drinking Water Quality, legally adopted in accordance with this code, which pertain to cross connections, auxiliary intakes, bypasses and interconnections; and shall establish an effective, on-going program to control these undesirable water uses. (Ord. #003-060, Feb. 2003)

18-405. Regulated. (1) No water service connection to any premises shall be installed or maintained by the Gleason Water System unless the water supply system is protected as required by state laws and this ordinance. Service of water to any premises shall be discontinued by the utility system if a backflow prevention device required by this ordinance is not installed, tested, and/or maintained; or if it is found that a backflow prevention device has been removed, bypassed, or if an unprotected cross connection exists on the premises. Service shall not be restored until such conditions or defects are corrected.

(2) It shall be unlawful for any person to cause a cross connection to be made or allow one to exist for any purpose whatsoever unless the construction and operation of same have been approved by the Tennessee Department of Environment and Conservation, and the operation of such cross connection is at all times under the direction of the manager of the Gleason Water System.

(3) If, in the judgment of the manager or his designated agent, an approved backflow prevention device is required at the water service connection to a customer's premises, or at any point(s) within the premises, to protect the potable water supply, the manager shall compel the installation, testing and maintenance of the required backflow prevention device(s) at the customer's expense.

(4) An approved backflow prevention device shall be installed on each water service line to a customer's premises 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.

(5) For new installations, the manager or his designated agent shall inspect the site and/or review plans in order to assess the degree of hazard and to determine the type of backflow prevention device, if any, that will be required, and to notify the owners in writing of the required device and installation

criteria. All required devices shall be installed and operational prior to the initiation of water service.

(6) For existing premises, personnel from the Gleason Water System shall conduct inspections and evaluations, and shall require correction of violations in accordance with the provisions of this ordinance. (Ord. #003-060, Feb. 2003)

18-406. New installations. No installation, alteration, or change shall be made to any backflow prevention device connected to the public water supply for water service, fire protection or any other purpose without first contacting the Gleason Water System for approval. (Ord. #003-060, Feb. 2003)

18-407. Existing installations. No alteration, repair, testing or change shall be made of any existing backflow prevention device connected to the public water supply for water service, fire protection or any other purpose without first securing the appropriate approval from the Gleason Water System. (Ord. #003-060, Feb. 2003)

18-408. Inspections. The manager or his designated agent shall inspect all properties served by the public water supply where cross connections with the public water supply are deemed possible. The frequency of inspections and reinspection shall be based on potential health hazards involved, and shall be established by the Gleason Water System in accordance with guidelines with guidelines acceptable to the Tennessee Department of Environment and Conservation. (Ord. #003-060, Feb. 2003)

18-409. Right of entry for inspection. The manager or his authorized representative shall have the right to enter, at any reasonable time, any property served by a connection to the Gleason Water System public water system for the purpose of inspecting the piping system therein for cross connection, auxiliary intakes, bypasses or interconnections, or for the testing of backflow prevention devices. Upon request, the owner, lessee, or occupant of any property so served shall furnish any pertinent information regarding the piping system(s) on such property. The refusal of such information or refusal of access, when requested, shall be deemed evidence of the presence of cross connections and shall be grounds for disconnection of water service. (Ord. #003-060, Feb. 2003)

18-410. Correction of violation. (1) Any person found to have cross connections, auxiliary intakes, bypasses or interconnections in violation of the provisions of this ordinance shall be allowed a reasonable time within which to comply with the provisions of this ordinance. After a thorough investigation of

the existing conditions and an appraisal of the time required to complete the work, an appropriate amount of time shall be assigned by the manager or his representative, but in no case shall the time for corrective measures exceed ninety (90) days.

(2) Where cross connections, auxiliary intakes, bypasses or interconnections are found that constitute an extreme hazard, with the immediate possibility of contaminating the public water system, the Gleason Water System shall require that immediate corrective action be taken to eliminate the threat to the public water system. Expeditious steps shall be taken to disconnect the public water system from the on-site piping system unless the imminent hazard is immediately corrected, subject to the right to a due process hearing upon timely request. The time allowed for preparation for a due process hearing shall be relative to the risk of hazard to the public health and may follow disconnection when the risk to the public health and safety, in the opinion of the manager, warrants disconnection prior to a due process hearing.

(3) The failure to correct conditions threatening the safety of the public water system as prohibited by this ordinance and Tennessee Code Annotated, § 68-221-711, within the time limits established by the manager or his representative, shall be grounds for denial of water service. If proper protection has not been provided after a reasonable time, the manager shall give the customer legal notification that water service is to be discontinued, and shall physically separate the public water system from the customer's on-site piping in such a manner that the two systems cannot again be connected by an unauthorized person, subject to the right of a due process hearing upon timely request. The due process hearing may follow disconnection when the risk to the public health and safety, in the opinion of the manager, warrants disconnection prior to a due process hearing. (Ord. #003-060, Feb. 2003)

18-411. Required devices. (1) An approved backflow prevention assembly shall be installed downstream of the meter on each service line to a customer's premises 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, when any of the following conditions exist:

- (a) Impractical to provide an effective air-gap separation;
- (b) The owner/occupant of the premises cannot or is not willing to demonstrate to the utility that the water use and protective features of the plumbing are such as to pose no threat to the safety or potability of the water;
- (c) The nature and mode of operation within a premise are such that frequent alterations are made to the plumbing;

(d) There is likelihood that protective measures may be subverted, altered or disconnected;

(e) The nature of the premises is such that the use of the structure may change to a use wherein backflow prevention is required;

(f) The plumbing from a private well or other water source enters the premises served by the public water system.

(2) The protective devices shall be of the reduced pressure zone type (except in the case of certain fire protection systems) approved by the Tennessee Department of Environment and Conservation and the utility, as to manufacture, model, size and application. The method of installation of backflow prevention devices shall be approved by the utility prior to installation and shall comply with the criteria set forth in this ordinance. The installation and maintenance of backflow prevention devices shall be at the expense of the owner or occupant of the premises.

(3) Applications requiring backflow prevention devices shall include, but not be limited to, domestic water service and/or fire flow connections for all medical facilities, all fountains, lawn irrigation systems, wells, water softeners and other treatment systems, swimming pools and all fire hydrant connections other than those by the fire department in combating fires. Those facilities deemed by Gleason Water System as needing protection.

(a) Class 1, Class 2 and Class 3 fire protection systems shall generally require a double check valve assembly; except

(i) A double check detector assembly shall be required where a hydrant or other point of use exists on the system; or

(ii) A reduced pressure backflow prevention device shall be required where:

(A) Underground fire sprinkler lines are parallel to and within ten (10) feet horizontally of pipes carrying sewage or significantly toxic materials;

(B) Premises have unusually complex piping systems;

(C) Pumpers connecting to the system have corrosion inhibitors or other chemicals added to the tanks of the fire trucks.

(b) Class 4, Class 5 and Class 6 fire protection systems shall require reduced pressure backflow prevention devices.

(c) Wherever the fire protection system piping is not an acceptable potable water system material, or chemicals such as foam concentrates or antifreeze additives are used, a reduced pressure backflow prevention device shall be required.

(4) The manager or his representative may require additional and/or internal backflow prevention devices wherein it is deemed necessary to protect potable water supplies within the premises.

(5) Installation criteria. The minimum acceptable criteria for the installation of reduced pressure backflow prevention devices, double check valve assemblies or other backflow prevention devices requiring regular inspection or testing shall include the following:

(a) All required devices shall be installed in accordance with the provisions of this ordinance, by a person approved by Gleason Water System who is knowledgeable in the proper installation. Only licensed sprinkler contractors may install, repair or test backflow prevention devices on fire protection systems.

(b) All devices shall be installed in accordance with the manufacturer's instructions and shall possess appropriate test cocks, fittings and caps required for the testing of the device. All fittings shall be of brass construction, unless otherwise approved by the utility, and shall permit direct connection to department test equipment.

(c) The entire device, including valves and test cocks, shall be easily accessible for testing and repair.

(d) All devices shall be placed in the upright position in a horizontal run of pipe.

(e) Device shall be protected from freezing, vandalism, mechanical abuse and from any corrosive, sticky, greasy, abrasive or other damaging environment.

(f) Reduced pressure backflow prevention devices shall be located a minimum of twelve (12) inches plus the nominal diameter of the device above either:

- (i) The floor;
- (ii) The top of opening(s) in the enclosure; or
- (iii) Maximum flood level, whichever is higher.

Maximum height above the floor surface shall not exceed sixty (60) inches.

(g) Clearance from wall surfaces or other obstructions shall be at least six (6) inches. Devices located in nonremovable enclosures shall have at least twenty-four (24) inches of clearance on each side of the device for testing and repairs.

(h) Devices shall be positioned where a discharge from the relief port will not create undesirable conditions. The relief port must never be plugged, restricted or solidly piped to a drain.

(i) An approved air-gap shall separate the relief port from any drainage system. An approved air-gap shall be at least twice the inside diameter of the supply line, but never less than one (1) inch.

(j) An approved strainer shall be installed immediately upstream of the backflow prevention device, except in the case of a fire protection system.

(k) Devices shall be located in an area free from submergence or flood potential, therefore never in a below grade pit or vault. All devices shall be adequately supported to prevent sagging.

(l) Adequate drainage shall be provided for all devices. Reduced pressure backflow prevention devices shall be drained to the outside whenever possible.

(m) Fire hydrant drains shall not be connected to the sewer, nor shall fire hydrants be installed such that backflow/backsiponage through the drain may occur.

(n) Enclosures for outside installations shall meet the following criteria:

(i) All enclosures for backflow prevention devices shall be as manufactured by a reputable company or an approved equal.

(ii) For backflow prevention devices up to and including two (2) inches, the enclosure shall be constructed of adequate material to protect the device from vandalism and freezing and shall be approved by Gleason Water System. The complete assembly, including valve stems and hand wheels, shall be protected by being inside the enclosure.

(iii) To provide access for backflow prevention devices up to and including two (2) inches, the enclosure shall be completely removable. Access for backflow prevention devices two-and-one-half (2 ½) inches and larger shall be provided through a minimum of two (2) access panels. The access panels shall be of the same height as the enclosure and shall be completely removable. All access panels shall be provided with built-in locks.

(iv) The enclosure shall be mounted to a concrete pad in no case less than four (4) inches thick. The enclosure shall be constructed, assembled and/or mounted in such a manner that it will remain locked and secured to the pad even if any outside fasteners are removed. All hardware and fasteners shall be constructed of 300 series stainless steel.

(v) Heating equipment, if required, shall be designed and furnished by the manufacturer of the enclosure to maintain an interior temperature of +40° F with an outside temperature of -30°F and a wind velocity of fifteen (15) miles per hour.

(o) Where the use of water is critical to the continuance of normal operations or the protection of life, property or equipment, duplicate backflow prevention devices shall be provided to avoid the

necessity of discontinuing water service to test or repair the protective device. Where it is found that only one device has been installed and the continuance of service is critical, the utility shall notify the occupant of the premises of plans to interrupt water services and arrange for a mutually acceptable time to test the device. In such cases, the utility may require the installation of a duplicate device.

(p) The utility shall require the occupant of the premises to keep any backflow prevention devices working properly, and to make all indicated repairs promptly. Repairs shall be made by qualified personnel acceptable to the utility. Expense of such repairs shall be borne by the owner or occupant of the premises. The failure to maintain a backflow prevention device in proper working condition shall be grounds for discontinuance of water service to a premises. Likewise the removal, bypassing or alteration of a backflow prevention device or the installation thereof, so as to render a device ineffective shall constitute a violation of this ordinance and shall be grounds for discontinuance of water service. Water service to such premises shall not be restored until the customer has corrected or eliminated such conditions or defects to the satisfaction of the utility.

(6) Testing of devices. Devices shall be tested at least annually by the Gleason Water System by a qualified person possessing a valid certification from the Tennessee Department of Environment and Conservation, Division of Water Supply for the testing of such devices. A record of this test will be on file with the utility and a copy of this report will be supplied to the customer. The owner of the device will be billed for this service on the next water bill. Costs for this service will be based on the actual cost of the inspection and testing. Water service shall not be disrupted to test a device without the knowledge of the occupant of the premises. (Ord. #003-060, Feb. 2003)

18-412. Nonpotable supplies. The potable water supply made available to a premises served by the public water system shall be protected from contamination as specified in the provisions of this ordinance. Any water pipe or outlet which could be used for potable or domestic purposes and which is not supplied by the potable water system must be labeled in a conspicuous manner such as:

WATER UNSAFE FOR DRINKING

The minimum acceptable sign shall have black letters at least one (1) inch high located on a red background. Color coding of pipelines, in accordance with (OSHA) Occupational Safety and Health Act guidelines, shall be required in

locations where in the judgment of the utility, such coding is necessary to identify and protect the potable water supply. (Ord. #003-060, Feb. 2003)

18-413. Statement required. Any person whose premises are supplied with water from the public water system, and who also has on the same premises a well or other separate source of water supply, or who stores water in an uncovered or unsanitary storage reservoir from which the water is circulated through a piping system, shall file with the utility a statement of the nonexistence of unapproved cross connections, auxiliary intakes, bypasses or interconnections. Such statement shall contain an agreement that no cross connections, auxiliary intakes, bypasses or interconnections will be permitted upon the premises. Such statement shall also include the location of all additional water sources utilized on the premises and how they are used. Maximum backflow protection shall be required on all public water sources supplied to the premises. (Ord. #003-060, Feb. 2003)

18-414. Penalty; discontinuance of water supply. (1) Any person who neglects or refuses to comply with any of the provisions of this ordinance may be deemed guilty of a misdemeanor and subject to a fine.

(2) Independent of and in addition to any fines or penalties imposed, the manager may discontinue the public water supply service to any premises upon which there is found to be a cross connection, auxiliary intake, bypass or interconnection; and service shall not be restored until such cross connection, auxiliary intake, bypass or interconnection has been eliminated. (Ord. #003-060, Feb. 2003)

18-415. Provision applicable. The requirements contained in this ordinance shall apply to all premises served by the Gleason Water System and are hereby made part of the conditions required to be met for the Gleason Water System to provide water services to any premises. The provisions of this ordinance shall be rigidly enforced since it is essential for the protection of the public water distribution system against the entrance of contamination. Any person aggrieved by the action of the ordinance is entitled to a due process hearing upon timely request. (Ord. #003-060, Feb. 2003)