

TITLE 18**WATER AND SEWERS¹****CHAPTER**

1. WATER AND SEWERS.
2. GENERAL WASTEWATER REGULATIONS.
3. CROSS-CONNECTIONS, AUXILIARY INTAKES, ETC.
4. CROSS-CONNECTION CONTROL PLAN.

CHAPTER 1**WATER AND SEWERS****SECTION**

- 18-101. Application and scope.
- 18-102. Definitions.
- 18-103. Obtaining service.
- 18-104. Application and contract for service.
- 18-105. Service charges for temporary service.
- 18-106. Connection charges.
- 18-107. Water and sewer main extensions.
- 18-108. Water and sewer main extension variances.
- 18-109. Meters.
- 18-110. Meter tests.
- 18-111. Multiple services through a single meter.
- 18-112. Billing.
- 18-113. Discontinuance or refusal of service.
- 18-114. Re-connection charge.
- 18-115. Termination of service by customer.
- 18-116. Access to customers' premises.
- 18-117. Inspections.
- 18-118. Customer's responsibility for system's property.
- 18-119. Customer's responsibility for violations.
- 18-120. Supply and resale of water.
- 18-121. Unauthorized use of or interference with water supply.
- 18-122. Limited use of unmetered private fire line.
- 18-123. Damages to property due to water pressure.
- 18-124. Liability for cutoff failures.

¹Municipal code references

Building, utility and residential codes: title 12.

Refuse disposal: title 17.

- 18-125. Restricted use of water.
- 18-126. Interruption of service.
- 18-127. Schedule of rates.

18-101. Application and scope. The provisions of this chapter are a part of all contracts for receiving water and/or sewer service from the municipality and shall apply whether the service is based upon contract, agreement, signed application, or otherwise. (1997 Code, § 18-101)

18-102. Definitions. (1) "Customer" means any person, firm, or corporation who receives water and/or sewer service from the municipality under either an express or implied contract.

(2) "Discount date" means the date ten (10) days after the date of a bill, except when some other date is provided by contract. The "discount date" is the last date upon which water and/or sewer bills can be paid at net rates.

(3) "Dwelling" means any single structure, with auxiliary buildings, occupied by one (1) or more persons or households for residential purposes.

(4) "Household" means any two (2) or more persons living together as a family group.

(5) "Premises" means any structure or group of structures operated as a single business or enterprise; provided, however, the term "premises" shall not include more than one (1) dwelling.

(6) "Service line" means the pipe line extending from any water or sewer main of the municipality to private property. Where a meter and meter box are located on private property, the service line shall be construed to include the pipe line extending from the municipality's water main to and including the meter and meter box. (1997 Code, § 18-102)

18-103. Obtaining service. A formal application for either original or additional service must be made and be approved by the municipality before connection or meter installation orders will be issued and work performed. (1997 Code, § 18-103)

18-104. Application and contract for service.¹ Each prospective customer desiring water and/or sewer from Algood Water Department will be required to sign a standard form contract before service is supplied, stating the type of service desired, size of connection desired, and the applicant agrees to comply with all ordinances of the City of Algood regulating water and sewer service. In the event the applicant is entitled to water service in accordance with the rules and regulations established by the department, the department shall

¹Water service and application fees, as amended from time to time, may be found in the office of the city recorder.

make all necessary arrangements to furnish these services at the point of delivery hereinafter defined.

Each residential customer desiring water and/or sewer service from the water department shall be required to pay a non-refundable application fee of forty-five dollars (\$45.00) per meter, except when more than one (1) meter is provided for the convenience of the water department and the consumption on the separate meters is combined for billing purposes. All customers, other than residential customers, desiring water service from the water department shall pay a non-refundable application fee of seventy five dollars (\$75.00) per meter, except when more than one (1) meter is provided for the convenience of the water department. (Ord. #627-18, Jan. 2019)

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. (1997 Code, § 18-105)

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 laid by the municipality, the applicant shall make a deposit equal to the estimated cost of the installation.

This deposit shall be used to pay the cost of laying such new service line and appurtenant equipment. If such cost exceeds the amount of the deposit, the applicant shall pay to the municipality the amount of such excess cost when billed therefor. If such cost is less than the amount of the deposit, the amount by which the deposit exceeds such cost shall be refunded to the applicant.

When a service line is completed, the municipality shall be responsible for the maintenance and upkeep of such service line from the main to and including the meter and meter box, and such portion of the service line shall belong to the municipality. The remaining portion of the service line beyond the meter box (or property line, in the case of sewers) shall belong to and be the responsibility of the customer. (1997 Code, § 18-106)

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 Waterworks Association Standard (or other construction approved by the governing body), not less than six inches (6") 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 one thousand feet (1,000') from the most distant part of any dwelling structure and no farther than six hundred feet (600') 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 inches (2") in diameter, to supply dwellings only, may be used to supplement such lines. For sewer main extensions eight-inch (8") 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 in accordance with plans and specifications prepared by an engineer registered with the State of Tennessee.

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. (1997 Code, § 18-107)

18-108. Water and sewer main extension variances. 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. (1997 Code, § 18-108)

18-109. Meters. All meters shall be installed, tested, repaired, and removed only by the municipality.

No one shall do anything which will in any way interfere with or prevent the operation of a meter. No one shall tamper with or work on a water meter without the written permission of the municipality. No one shall install any pipe or other device which will cause water to pass through or around a meter without the passage of such water being registered fully by the meter. (1997 Code, § 18-109)

18-110. Meter tests. The municipality will, at its own expense, make routine tests of meters when it considers such tests desirable.

In testing meters, the water passing through a meter will be weighed or measured at various rates of discharge and under varying pressures. To be

considered accurate, the meter registration shall check with the weighed or measured amounts of water within the percentage shown in the following table:

<u>Meter Size</u>	<u>Percentage</u>
5/8", 3/4", 1", 2"	2%
3"	3%
4"	4%
6"	5%

The municipality will also make tests or inspections of its meters at the request of the customer. However, if a test requested by a customer shows a meter to be accurate within the limits stated above, the customer shall pay a meter testing charge in the amount stated in the following table:

<u>Meter Size</u>	<u>Test Charge</u>
5/8", 3/4", 1"	\$ 2.00
1-1/2", 2"	5.00
3"	8.00
4"	12.00
6" and over	20.00

If such test shows a meter not to be accurate within such limits, the cost of such meter test shall be borne by the municipality. (1997 Code, § 18-110)

18-111. Multiple services through a single meter. No customer shall supply water or sewer service to more than one (1) dwelling or premises from a single service line and meter without first obtaining the written permission of the municipality.

Where the municipality allows more than one (1) dwelling or premises to be served through a single service line and meter, the amount of water used by all the dwellings and premises served through a single service line and meter shall be allocated to each separate dwelling or premises served. The water and/or sewer charges for each such dwelling or premises thus served shall be computed just as if each such dwelling or premises had received through a separately metered service the amount of water so allocated to it, such computation to be made at the municipality's applicable water rates schedule, including the provisions as to minimum bills. The separate charges for each dwelling or premises served through a single service line and meter shall then be added together, and the sum thereof shall be billed to the customer in whose name the service is supplied. (1997 Code, § 18-111)

18-112. Billing. Bills for residential water and sewer service will be rendered monthly.

Bills for commercial and industrial service may be rendered weekly, semimonthly, or monthly, at the option of the municipality.

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 nonpayment of the combined bill.

Water and sewer bills must be paid on or before the discount date shown thereon to obtain the net rate, otherwise the gross rate shall apply. Failure to receive a bill will not release a customer from payment obligation, nor extend the discount date.

No second notice will be sent to any utility customer. Bills are mailed on the last working day of each month. Bills are payable on or before the discount date shown on the bill, otherwise the gross rate shall apply. Cut offs will begin on the twenty-third of each month unless the twenty-third falls on a weekend in which case cut offs will begin on the following Monday.

Should the final date of payment of bill at the net rate fall on Sunday or a holiday, the business day next following the final date will be the last day to obtain the net rate. A net remittance received by mail after the time limit for payment at the net rate will be accepted by the municipality if the envelope is date-stamped on or before the final date for payment of the net amount.

If a meter fails to register properly, or if a meter is removed to be tested or repaired, or if water is received other than through a meter, the municipality reserves the right to render an estimated bill based on the best information available.

A customer may dispute any aspect of their bill at city hall during normal business hours.

In the event the bill is not paid after collection attempts have been made, the account may be referred to a collection agency. The delinquent party will be responsible for all costs of collection, including, but not limited to, attorney's fees, collections agency fees, and clerk of court's fees. (1997 Code, § 18-112, as amended by Ord. #481-07, May 2007, and Ord. #629-19, March 2019, modified)

18-113. Discontinuance or refusal of service. The municipality shall have the right to discontinue water and/or 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.
- (2) The customer's application for service.
- (3) The customer's contract for service.

Such 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 services therefrom, and even though the delinquency or violation is limited to only one (1) 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. (1997 Code, § 18-113)

18-114. Re-connection charge. (1) Connection charge. A service charge of ten dollars (\$10.00) shall be collected for each service connection during the hours of 8:00 A.M. to 3:00 P.M. and twenty dollars (\$20.00) for all service connections after 3:00 P.M.

(2) Disconnection charge for nonpayment of account. When service has been disconnected by the water department for nonpayment of account, a service charge of ten dollars (\$10.00) shall be assessed.

(3) Reconnection charge due to nonpayment of account. When service has been disconnected by the water department for nonpayment of account, a service charge of twenty dollars (\$20.00) shall be collected to restore service.

(4) Returned checks. A thirty dollar (\$30.00) service charge will be charged for each check returned by the bank unpaid. If it is determined that the check returned was caused by bank error then the thirty dollar (\$30.00) service charge shall be waived. (Ord. #627-18, Jan. 2019)

18-115. 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, or thereafter, 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. (1997 Code, § 18-115)

18-116. Access to customers' premises. The municipality's identified representatives and employees shall be granted access to all customers' premises at all reasonable times for the purpose of reading meters, 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. (1997 Code, § 18-116)

18-117. 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 fixed by municipal ordinances regulating building and plumbing, 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. (1997 Code, § 18-117)

18-118. Customer's responsibility for system's property. Except as herein elsewhere expressly provided, all meters, 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 same, the cost of necessary repairs or replacements shall be paid by the customer. (1997 Code, § 18-118)

18-119. 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. (1997 Code, § 18-119)

18-120. 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. (1997 Code, § 18-120)

18-121. 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. (1997 Code, § 18-121)

18-122. 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. (1997 Code, § 18-122)

18-123. 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. (1997 Code, § 18-123)

18-124. 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. (1997 Code, § 18-124)

18-125. 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. (1997 Code, § 18-125)

18-126. 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 damage 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 damage from such interruption of service or for damages from the resumption of service without notice after any such interruption. (1997 Code, § 18-126)

18-127. Schedule of rates. All water and sewer service and tap fees shall be furnished under such rate schedules as the municipality may from time to time adopt by appropriate ordinance or resolution.¹ (1997 Code, § 18-127, modified)

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

CHAPTER 2

GENERAL WASTEWATER REGULATIONS

SECTION

- 18-201. Purpose and policy.
- 18-202. Administrative.
- 18-203. Definitions.
- 18-204. Proper waste disposal required.
- 18-205. Private domestic wastewater disposal.
- 18-206. Connection to public sewers.
- 18-207. Grinder pump wastewater systems.
- 18-208. Regulation of holding tank waste disposal or trucked in waste.
- 18-209. Discharge regulations.
- 18-210. Enforcement and abatement.
- 18-211. Validity.

18-201. Purpose and policy. This chapter sets forth uniform requirements for users of the City of Algood, Tennessee, wastewater treatment system and enables the city to comply with the Federal Clean Water Act and the State Water Quality Control Act and rules adopted pursuant to these acts. The objectives of this chapter are:

- (1) To protect public health;
- (2) To prevent the introduction of pollutants into the municipal wastewater treatment facility, which will interfere with the system operation;
- (3) To prevent the introduction of pollutants into the wastewater treatment facility that will pass through the facility, inadequately treated, into the receiving waters, or otherwise be incompatible with the treatment facility;
- (4) To protect facility personnel who may be affected by wastewater and sludge in the course of their employment and the general public;
- (5) To promote reuse and recycling of industrial wastewater and sludge from the facility;
- (6) To provide for fees for the equitable distribution of the cost of operation, maintenance, and improvement of the facility; and
- (7) To enable the city to comply with National Pollution Discharge Elimination System (NPDES) permit conditions, sludge and biosolid use and disposal requirement, and any other federal or state industrial pretreatment rules to which the facility is subject.

In meeting these objectives, this chapter provides that all persons in the service area of the City of Algood must have adequate wastewater treatment either in the form of a connection to the municipal wastewater treatment system or, where the system is not available, an appropriate private disposal system.

This chapter shall apply to all users inside or outside the city who are, by implied contract or written agreement with the city, dischargers of applicable wastewater to the wastewater treatment facility. (Ord. #533-09, Dec. 2009)

18-202. Administrative. Except as otherwise provided herein, the public works director shall serve as the local administrative officer of the city who shall administer, implement, and enforce the provisions of this chapter. The mayor and council shall make up the local hearing authority. (Ord. #533-09, Dec. 2009)

18-203. Definitions. Unless the context specifically indicates otherwise, the following terms and phrases, as used in this chapter, shall have the meanings hereinafter designated:

(1) "Act" or "the Act." The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended and found in 33 U.S.C. §§ 1251, *et seq.*

(2) "Administrator." The Administrator or the United States Environmental Protection Agency.

(3) "Approval authority." The Tennessee Department of Environment and Conservation, Division of Water Pollution Control.

(4) "Authorized or duly authorized representative of industrial user."

(a) If the user is a corporation:

(i) The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any person who performs similar policy or decision-making functions for the corporation; or

(ii) The manager of one (1) or more manufacturing, production, or operating facilities; provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for individual wastewater discharge permit requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(b) If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively.

(c) If the user is a federal, state, or local governmental agency: a director or highest official appointed or designated to oversee the

operation and performance of the activities of the governmental facility, or their designee.

(d) The individual described in subsections (a) through (c) above may designate a duly authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the city.

(5) "Best Management Practices" or "BMPs." Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in § 18-209 of this chapter. "BMPs" also include treatment requirement, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

(6) "Biochemical Oxygen Demand (BOD)." The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure for five (5) days at twenty (20) centigrade expressed in terms of weight and concentration (milligrams per liter (mg/l)).

(7) "Building sewer." A sewer conveying wastewater from the premises of a user to the publicly owned sewer collection system.

(8) "Categorical standards." The National Categorical Pretreatment Standards or Pretreatment Standard as found in 40 CFR chapter I, subchapter N, parts 405-471.

(9) "City." The City of Algood, Tennessee.

(10) "Commissioner." The Commissioner of Environment and Conservation or the commissioner's duly authorized representative and, in the event of the commissioner's absence or a vacancy in the office of commissioner, the deputy commissioner.

(11) "Compatible pollutant." BOD, suspended solids, pH, fecal coliform bacteria, and such additional pollutants as are now or may in the future be specified and controlled in the NPDES permit for the wastewater treatment works where sewer works have been designed and used to reduce or remove such pollutants.

(12) "Composite sample." A sample composed of two (2) or more discrete samples. The aggregate sample will reflect the average water quality covering the compositing or sample period.

(13) "Control authority." The term "control authority" shall refer to the "approval authority," defined herein above; or the local hearing authority if the city has an approved pretreatment program under the provisions of 40 CFR § 403.11.

(14) "Cooling water." The water discharge from any use such as air conditioning, cooling, or refrigeration, or to which the only pollutant added is heat.

(15) "Customer." Any individual, partnership, corporation, association, or group who receives sewer service from the city under either an express or implied contract requiring payment to the city for such service.

(16) "Daily maximum." The arithmetic average of all effluent samples for a pollutant (except pH) collected during a calendar day. The daily maximum for pH is the highest value tested during a twenty-four (24) hour calendar day.

(17) "Daily maximum limit." The maximum allowable discharge limit of a pollutant during a calendar day. Where the limit is expressed in units of mass, the limit is the maximum amount of total mass of the pollutant that can be discharged during the calendar day. Where the limit is expressed in concentration, it is the arithmetic average of all concentration measurements taken during the calendar day.

(18) "Direct discharge." The discharge of treated or untreated wastewater directly to the waters of the State of Tennessee.

(19) "Domestic wastewater." Wastewater that is generated by a single family, apartment or other dwelling unit or dwelling unit equivalent or commercial establishment containing sanitary facilities for the disposal of wastewater and used for residential or commercial purposes only.

(20) "Environmental Protection Agency" or "EPA." The U.S. Environmental Protection Agency, or where appropriate, the term may also be used as a designation for the administrator or other duly authorized official of the said agency.

(21) "Garbage." Solid wastes generated from any domestic, commercial or industrial source.

(22) "Grab sample." A sample which is taken from a waste stream on a one (1) time basis with no regard to the flow in the waste stream and is collected over a period of time not to exceed fifteen (15) minutes. Grab sampling procedure: Where composite sampling is not an appropriate sampling technique, a grab sample(s) shall be taken to obtain influent and effluent operational data. Collection of influent grab samples should precede collection of effluent samples by approximately one (1) detention period. The detention period is to be based on a twenty-four (24) hour average daily flow value. The average daily flow used will be based upon the average of the daily flows during the same month of the previous year. Grab samples will be required, for example, where the parameters being evaluated are those, such as cyanide and phenol, which may not be held for any extended period because of biological, chemical or physical interactions which take place after sample collection and affect the results.

(23) "Grease interceptor." An interceptor whose rated flow is fifty (50) g.p.m. (gallons per minute) or less and is generally located inside the building.

(24) "Grease trap." An interceptor whose rated flow is fifty (50) g.p.m. or more and is located outside the building.

(25) "Holding tank waste." Any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks, and vacuum-pump tank trucks.

(26) "Incompatible pollutant." Any pollutant which is not a "compatible pollutant" as defined in this section.

(27) "Indirect discharge." The introduction of pollutants into the WWF from any nondomestic source.

(28) "Industrial user." A source of indirect discharge which does not constitute a "discharge of pollutants" under regulations issued pursuant to section 402 of the Act (33 U.S.C. § 1342).

(29) "Industrial wastes." Any liquid, solid, or gaseous substance, or combination thereof, or form of energy including heat, resulting from any process of industry, manufacture, trade, food processing or preparation, or business or from the development of any natural resource.

(30) "Instantaneous limit." The maximum concentration of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.

(31) "Interceptor." A device designed and installed to separate and retain for removal, by automatic or manual means, deleterious, hazardous or undesirable matter from normal wastes, while permitting normal sewage or waste to discharge into the drainage system by gravity.

(32) "Interference." A discharge that, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the WWF, its treatment processes or operations, or its sludge processes, use or disposal, or exceeds the design capacity of the treatment works or collection system.

(33) "Local administrative officer." The chief administrative officer of the local hearing authority.

(34) "Local hearing authority." The mayor and councilmen or such person or persons appointed by the board to administer and enforce the provisions of this chapter and conduct hearings pursuant to § 18-205.

(35) "NAICS, North American Industrial Classification System." A system of industrial classification jointly agreed upon by Canada, Mexico and the United States. It replaces the Standard Industrial Classification (SIC) System.

(36) "National categorical pretreatment standard or pretreatment standard." Any regulation containing pollutant discharge limits promulgated by the EPA in accordance with section 307(b) and (c) of the Act (33 U.S.C. § 1347) which applies to a specific category of industrial users.

(37) "New source." (a) Any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under section 307(c) of the Clean Water Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section; provided that:

(i) The building structure, facility or installation is constructed at a site at which no other source is located;

(ii) The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(iii) The production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.

(b) Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of subsections (a)(ii) or (a)(iii) of this definition but otherwise alters, replaces, or adds to existing process or production equipment.

(c) Construction of a new source as defined under this subsection has commenced if the owner or operator has:

(i) Begun, or caused to begin as part of a continuous onsite construction program:

(A) Any placement, assembly, or installation of facilities or equipment; or

(B) Significant site preparation work including cleaning, excavation or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment.

(ii) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this subsection.

(38) "NPDES (National Pollution Discharge Elimination System)." The program for issuing, conditioning, and denying permits for the discharge of pollutants from point sources into navigable waters, the contiguous zone, and the oceans pursuant to section 402 of the Clean Water Act as amended.

(39) "Pass-through." A discharge which exits the Wastewater Facility (WWF) into waters of the state in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the WWF's NPDES permit including an increase in the magnitude or duration of a violation.

(40) "Person." Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives,

agents, or assigns. The masculine gender shall include the feminine and the singular shall include the plural where indicated by the context.

(41) "pH." The logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in grams per liter of solution.

(42) "Pollutant." Any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical waste, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste and certain characteristics of wastewater (e.g., pH, temperature, turbidity, color, BOD, COD, toxicity, or odor discharge into water).

(43) "Pollution." The human-made or human-induced alteration of the chemical, physical, biological, and radiological integrity of water.

(44) "Pretreatment or treatment." The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration can be obtained by physical, chemical, biological processes, or process changes or other means, except through dilution as prohibited by 40 CFR § 403.6(d).

(45) "Pretreatment coordinator." The person designated by the local administrative officer or his authorized representative to supervise the operation of the pretreatment program.

(46) "Pretreatment requirements." Any substantive or procedural requirement related to pretreatment other than a national pretreatment standard imposed on an industrial user.

(47) "Pretreatment standards or standards." A prohibited discharge standard, categorical pretreatment standard and local limit.

(48) "Publicly Owned Treatment Works (POTW)." A treatment works as defined by section 212 of the Act (33 U.S.C. § 1292), which is owned in this instance by the municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works. See "WWF, Wastewater Facility", found in subsection (63) below.

(49) "Shall" is mandatory; "May" is permissive.

(50) "Significant industrial user." The "term significant industrial user" means:

(a) All industrial users subject to categorical pretreatment standards under 40 CFR § 403.6 and 40 CFR chapter I, subchapter N; and

(b) Any other industrial user that: discharges an average of twenty-five thousand (25,000) gallons per day or more of process wastewater to the WWF (excluding sanitary, non-contact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up five percent (5%) or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the control authority as defined in 40 CFR § 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the WWF's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR § 403.8(f)(6)).

(51) "Significant noncompliance." Per 1200-4-14-.08(6)(b)8: (a) Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent (66%) or more of all of the measurements taken for each parameter taken during a six (6) month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous limit.

(b) Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent (33%) or more of all of the measurements for each pollutant parameter taken during a six (6) month period equal or exceed the product of the numeric pretreatment standard or requirement, including instantaneous limits multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH). TRC calculations for pH are not required.

(c) Any other violation of a pretreatment standard or requirement (daily maximum or longer-term average, instantaneous limit, or narrative standard) that the WWF determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of WWF personnel or the general public).

(d) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the WWF's exercise of its emergency authority under § 18-209, emergency order, to halt or prevent such a discharge.

(e) Failure to meet, within ninety (90) days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance.

(f) Failure to provide, within forty-five (45) days after their due date, required reports such as baseline monitoring reports, ninety (90) day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules.

(g) Failure to accurately report noncompliance.

(h) Any other violation or group of violations, which may include a violation of best management practices, which the WWF determines

will adversely affect the operation or implementation of the local pretreatment program.

(i) Continuously monitored pH violations that exceed limits for a time period greater than fifty (50) minutes or exceed limits by more than 0.5 s.u. more than eight (8) times in four (4) hours.

(52) "Slug." Any discharge of a non-routine, episodic nature, including, but not limited to, an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause interference or pass-through, or in any other way violate the WWF's regulations, local limits, or permit conditions.

(53) "Standard Industrial Classification (SIC)." A classification pursuant to the *Standard Industrial Classification Manual* issued by the Executive Office of the President, Office of Management and Budget, 1972.

(54) "State." The State of Tennessee.

(55) "Storm sewer or storm drain." A pipe or conduit which carries storm and surface waters and drainage, but excludes sewage and industrial wastes. It may, however, carry cooling waters and unpolluted waters, upon approval of the superintendent.

(56) "Stormwater." Any flow occurring during or following any form of natural precipitation and resulting therefrom.

(57) "Superintendent." The local administrative officer or person designated by him to supervise the operation of the publicly owned treatment works and who is charged with certain duties and responsibilities by this chapter, or his duly authorized representative.

(58) "Suspended solids." The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquids and that is removable by laboratory filtering.

(59) "Toxic pollutant." Any pollutant or combination of pollutants listed as toxic in regulations published by the Administrator of the Environmental Protection Agency under the provision of CWA 307(a) or other Acts.

(60) "Twenty-four (24) hour flow proportional composite sample." A sample consisting of several sample portions collected during a twenty-four (24) hour period in which the portions of a sample are proportioned to the flow and combined to form a representative sample.

(61) "User." The owner, tenant or occupant of any lot or parcel of land connected to a sanitary sewer, or for which a sanitary sewer line is available if a municipality levies a sewer charge on the basis of such availability, *Tennessee Code Annotated*, § 68-221-201.

(62) "Wastewater." The liquid and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, whether treated or untreated, which is contributed into or permitted to enter the WWF.

(63) "Wastewater facility." Any or all of the following: the collection/transmission system, treatment plant, and the reuse or disposal system, which is owned by any person. This definition includes any devices and

systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial waste of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a WWF treatment plant. The term also means the municipality as defined in section 502(4) of the Federal Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works. WWF was formerly known as a POTW, or Publicly Owned Treatment Works. The POTW is the Cookeville, Tennessee wastewater treatment plant which treats all wastewater from Algood, Tennessee.

(64) "Waters of the state." All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and other bodies of accumulation of water, surface or underground, natural or artificial, public or private, that are contained within, flow through, or border upon the state or any portion thereof.

(65) "1200-4-14." Chapter 1200-4-14 of the Rules and Regulations of the State of Tennessee, Pretreatment Requirements. (Ord. #533-09, Dec. 2009)

18-204. Proper waste disposal 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 service area of the city, any human or animal excrement, garbage, or other objectionable waste.

(2) It shall be unlawful to discharge to any waters of the state within the service area of the city any sewage or other polluted waters, except where suitable treatment has been provided in accordance with provisions of this chapter or city, state or federal regulations.

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

(4) Except as provided in subsection (6) below, the owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes situated within the service area in which there is now located or may in the future be located a public sanitary sewer, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper private or public sewer in accordance with the provisions of this chapter. Where public sewer is available property owners shall within sixty (60) days after date of official notice to do so, connect to the public sewer. Service is considered "available" when a public sewer main is located in an easement, right-of-way, road or public access way which abuts the property.

(5) Where a public sanitary sewer is not available under the provisions of subsection (4) above, the building sewer shall be connected to a private sewage disposal system complying with the provisions of § 18-205 of this chapter.

(6) The owner of a manufacturing facility may discharge wastewater to the waters of the state; provided that he obtains an NPDES permit and meets

all requirements of the Federal Clean Water Act, the NPDES permit, and any other applicable local, state, or federal statutes and regulations. (Ord. #533-09, Dec. 2009)

18-205. Private domestic wastewater disposal. (1) Availability.

(a) Where a public sanitary sewer is not available under the provisions of § 18-204(4), the building sewer shall be connected, until the public sewer is available, to a private wastewater disposal system complying with the provisions of the applicable local and state regulations.

(b) The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the city. When it becomes necessary to clean septic tanks, the sludge may be disposed of only according to applicable federal and state regulations.

(c) Where a public sewer becomes available, the building sewer shall be connected to said sewer within sixty (60) days after date of official notice from the city to do so.

(2) Requirements. (a) The type, capacity, location and layout of a private sewerage disposal system shall comply with all local or state regulations. Before commencement of construction of a private sewerage disposal system, the owner shall first obtain a written approval from the county health department. The application for such approval shall be made on a form furnished by the county health department which the applicant shall supplement with any plans or specifications that the department has requested.

(b) Approval for a private sewerage disposal system shall not become effective until the installation is completed to the satisfaction of the local and state authorities, who shall be allowed to inspect the work at any stage of construction.

(c) The type, capacity, location, and layout of a private sewage disposal system shall comply with all recommendations of the Tennessee Department of Environment and Conservation, and the county health department. No septic tank or cesspool shall be permitted to discharge to waters of Tennessee.

(d) No statement contained in this chapter shall be construed to interfere with any additional or future requirements that may be imposed by the city and the county health departments. (Ord. #533-09, Dec. 2009)

18-206. Connection to public sewers. (1) Application for service.

(a) There shall be two (2) classifications of service:

- (i) Residential; and
- (ii) Service to commercial, industrial and other nonresidential establishments.

In either case, the owner or his agent shall make application for connection on a special form furnished by the city. Applicants for service to commercial and industrial establishments shall be required to furnish information about all waste producing activities, wastewater characteristics and constituents. The application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the city. Details regarding commercial and industrial permits include, but are not limited to, those required by this chapter. Service connection fees for establishing new sewer service are paid to the city. Industrial user discharge permit fees may also apply. The receipt by the city of a prospective customer's application for connection shall not obligate the city to render the connection. If the service applied for cannot be supplied in accordance with this chapter and the city's rules and regulations and general practice, or state and federal requirement, the connection charge will be refunded in full, and there shall be no liability of the city to the applicant for such service.

(b) Users shall notify the city of any proposed new introduction of wastewater constituents or any proposed change in the volume or character of the wastewater being discharged to the system a minimum of sixty (60) days prior to the change. The city may deny or limit this new introduction or change based upon the information submitted in the notification.

(2) Prohibited connections. No person shall make connections of roof downspouts, sump pumps, basement wall seepage or floor seepage, exterior foundation drains, area way 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. Any such connections which already exist on the effective date of the ordinance comprising this chapter shall be completely and permanently disconnected within sixty (60) days of the effective day of the ordinance comprising this chapter. The owners of any building sewer having such connections, leaks or defects shall bear all of the costs incidental to removal of such sources. Pipes, sumps and pumps for such sources of groundwater shall be separate from the sanitary sewer.

(3) Physical connection to public sewer. (a) No person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof. The city shall make all connections to the public sewer upon the property owner first submitting a connection application to the city.

The connection application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the superintendent. A service connection fee shall be paid to the city at the time the application is filed.

The applicant is responsible for excavation and installation of the building sewer which is located on private property. The city will inspect

the installation prior to backfilling and make the connection to the public sewer.

(b) All costs and expenses incident to the installation, connection, and inspection of the building sewer shall be borne by the owner including all service and connection fees. The owner shall indemnify the city from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

(c) A separate and independent building sewer shall be provided for every single family unit or commercial building; unless the sewer has been sized for multiple units; except where one (1) 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 (1) building sewer. Where property is subdivided and buildings use a common building sewer are now located on separate properties, the building sewers must be separated within sixty (60) days.

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

(e) Building sewers shall conform to the following requirements:

(i) The minimum size of a building sewer shall be as follows: Conventional sewer system shall be four inches (4").

(ii) The minimum depth of a building sewer shall be eighteen inches (18").

(iii) Building sewers shall be laid on the following grades: Four inch (4") sewers, one-eighth inch (1/8") per foot.

Larger building sewers shall be laid on a grade that will produce a velocity when flowing full of at least two feet (2') per second.

(iv) Building sewers shall be installed in uniform alignment at uniform slopes.

(v) Building sewers shall be constructed only of polyvinyl chloride pipe Schedule 40 or better. Joints shall be solvent welded or compression gaskets designed for the type of pipe used. No other joints shall be acceptable.

(vi) Cleanouts shall be provided to allow cleaning in the direction of flow. A cleanout shall be located five feet (5') outside of the building, as it crosses the property line and one (1) at each change of direction of the building sewer which is greater than forty-five degrees (45°). Additional cleanouts shall be placed not more than seventy-five feet (75') apart in horizontal building sewers of six inch (6") or four inch (4") nominal diameter and not

more than one hundred feet (100') apart for larger pipes. Cleanouts shall be extended to or above the finished grade level directly above the place where the cleanout is installed and protected from damage. A "Y" (wye) and one-eighth (1/8) bend shall be used for the cleanout base. Cleanouts shall not be smaller than four inches (4"). Blockages on the property owner's side of the property line cleanout are the responsibility of the property owner.

(vii) Connections of building sewers to the public sewer system shall be made only by the city and shall be made at the appropriate existing wyes or tee branch using compression type couplings or collar type rubber joint with stainless steel bands. Where existing wye or tee branches are not available, connections of building services shall be made by either removing a length of pipe and replacing it with a wye or tee fitting using flexible neoprene adapters with stainless steel bands of a type approved by the superintendent. Bedding must support pipe to prevent damage or sagging. All such connections shall be made gastight and watertight.

(viii) 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 pump system according to § 18-207 and discharged to the building sewer at the expense of the owner.

(ix) The methods to be used in excavating, placing of pipe, jointing, testing, backfilling the trench, or other activities in the construction of a building sewer which have not been described above shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the city or to the procedures set forth in appropriate specifications by the ASTM. Any deviation from the prescribed procedures and materials must be approved by the superintendent before installation.

(x) An installed building sewer shall be gastight and watertight.

(f) All excavations for building sewer installation 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 city.

(g) No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, basement drains, sump pumps, or other sources of surface runoff or groundwater to a building directly or indirectly to a public sanitary sewer.

(h) Inspection of connections. (i) The sewer connection and all building sewers from the building to the public sewer main line shall be inspected before the underground portion is covered, by the superintendent or his authorized representative.

(ii) The applicant for discharge 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.

(4) Maintenance of building sewers. Each individual property owner shall be entirely responsible for the construction, maintenance, repair or replacement of the building sewer as deemed necessary by the superintendent to meet specifications of the city. Owners failing to maintain or repair building sewers or who allow stormwater or groundwater to enter the sanitary sewer may face enforcement action by the city up to and including discontinuation of water and sewer service.

(5) Sewer extensions. All expansion or extension of the public sewer constructed by property owners or developers must follow policies and procedures developed by the city. In the absence of policies and procedures the expansion or extension of the public sewer must be approved in writing by the superintendent or manager of the wastewater collection system. All plans and construction must follow the latest edition of Tennessee Design Criteria for Sewerage Works, located at <http://www.state.tn.us/environment/wpc/publications/>. Contractors must provide the superintendent or manager with as-built drawing and documentation that all mandrel, pressure and vacuum tests as specified in design criteria were acceptable prior to use of the lines. Contractor's one (1) year warranty period begins with occupancy or first permanent use of the lines. Contractors are responsible for all maintenance and repairs during the warranty period and final inspections as specified by the superintendent or manager. The superintendent or manager must give written approval to the contractor to acknowledge transfer of ownership to the city. Failure to construct or repair lines to acceptable standards could result in denial or discontinuation of sewer service. (Ord. #533-09, Dec. 2009)

18-207. Grinder pump wastewater systems. When connection of building sewers to the public sewer by gravity flow lines is impossible due to elevation differences or other encumbrances, a Grinder Pump (GP) system may be installed subject to the approval of the city.

(1) Equipment requirements. Pumps and related appurtenances must be approved by the city.

(2) Installation requirements. Location of tanks, pumps, and effluent lines shall be subject to the approval of the city. Installation shall follow design criteria for GP systems as provided by the city.

(3) Costs. GP equipment shall be purchased and installed at the developer's, homeowner's, or business owner's expense according to the specifications of the city and connection will be made to the city sewer only after inspection and approval of the city.

(4) Ownership and agreement. All single and individual grinder pump installations shall remain the property of the owner. Homeowners or developers shall provide the city, at the election of the city, with ownership of the equipment and an agreement for access to perform necessary maintenance or repair for establishments served by more than one (1) water meter. Access by the city to the GP system must be guaranteed to operate, maintain, repair, restore service, and remove sludge. Access manholes, ports, and electrical disconnects must not be locked, obstructed or blocked by landscaping or construction.

(5) Use of GP systems. (a) Home or business owners shall follow the GP users guide provided by the superintendent.

(b) Home or business owners shall provide an electrical connection that meets specifications and shall provide electrical power.

(c) Home or business owners shall be responsible for maintenance of drain lines from the building to the GP tank.

(d) Prohibited uses of the GP system.

(i) Connection of roof guttering, sump pumps or surface drains.

(ii) Disposal of toxic household substances.

(iii) Use of garbage grinders or disposers.

(iv) Discharge of pet hair, lint, or home vacuum water.

(v) Discharge of fats, grease, and oil.

(6) Additional charges. The city shall be responsible for maintenance of the units in which the city assumes ownership. Customer shall be assessed a monthly maintenance charge as determined by the city per pump unit which will be added to customer's sewer bill. (Ord. #533-09, Dec. 2009)

18-208. Regulation of holding tank waste disposal or trucked in waste. (1) No person, firm, association or corporation shall haul in or truck in to the WWF any type of domestic, commercial or industrial waste unless such person, firm, association, or corporation obtains a written approval from the city to perform such acts or services.

Any person, firm, association, or corporation desiring a permit to perform such services shall file an application on the prescribed form. Upon any such application, said permit shall be issued by the superintendent when the conditions of this chapter have been met and providing the superintendent is satisfied the applicant has adequate and proper equipment to perform the services contemplated in a safe and competent manner.

(2) Fees. For each permit issued under the provisions of this chapter the applicant shall agree in writing by the provisions of this section and pay an

annual service charge to the city to be set as specified in § 18-207. Any such permit granted shall be for a specified period of time, and shall continue in full force and effect from the time issued until the expiration date, unless sooner revoked, and shall be nontransferable. The number of the permit granted hereunder shall be plainly painted in three inch (3") permanent letters on each side of each motor vehicle used in the conduct of the business permitted hereunder.

(3) Designated disposal locations. The superintendent shall designate approved locations for the emptying and cleansing of all equipment used in the performance of the services rendered under the permit herein provided for, and it shall be a violation hereof for any person, firm, association or corporation to empty or clean such equipment at any place other than a place so designated. The superintendent may refuse to accept any truckload of waste at his discretion where it appears that the waste could interfere with the operation of the WWF.

(4) Revocation of permit. Failure to comply with all the provisions of the permit or this chapter shall be sufficient cause for the revocation of such permit by the superintendent. The possession within the service area by any person of any motor vehicle equipped with a body type and accessories of a nature and design capable of serving a septic tank of wastewater or excreta disposal system cleaning unit shall be prima facie evidence that such person is engaged in the business of cleaning, draining, or flushing septic tanks or other wastewater or excreta disposal systems within the service area of the City of Algood.

(5) Trucked in waste. This part includes waste from trucks, railcars, barges, etc., or temporally pumped waste, all of which are prohibited without a permit issued by the superintendent. This approval may require testing, flow monitoring and record keeping. (Ord. #533-09, Dec. 2009)

18-209. Discharge regulations. (1) General discharge prohibitions. No user shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will pass through or interfere with the operation and performance of the WWF. These general prohibitions apply to all such users of a WWF whether or not the user is subject to national categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements. Violations of these general and specific prohibitions or the provisions of this section may result in the issuance of an industrial pretreatment permit, surcharges, discontinuance of water and/or sewer service and other fines and provisions of § 18-210. A user may not contribute the following substances to any WWF:

(a) Any liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the WWF or to the operation of the WWF. Prohibited flammable

materials including, but not limited to, wastestreams with a closed cup flash point of less than one hundred forty degrees Fahrenheit (140°F) or sixty degrees Celsius (60°C) using the test methods specified in 40 CFR § 461.21. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromate, carbides, hydrides and sulfides and any other substances which the city, the state or EPA has notified the user is a fire hazard or a hazard to the system.

(b) Any wastewater having a pH less than 5.5 or higher than 9.5 or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment, and/or personnel of the WWF.

(c) Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities including, but not limited to: grease, garbage with particles greater than one-half inch (1/2") in any dimension, waste from animal slaughter, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, mud, or glass grinding or polishing wastes.

(d) Any pollutants, including oxygen demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which will cause interference to the WWF.

(e) Any wastewater having a temperature which will inhibit biological activity in the WWF treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the WWF which exceeds forty degrees Celsius (40°C) or one hundred four degrees Fahrenheit (104°F) unless approved by the State of Tennessee.

(f) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.

(g) Pollutants which result in the presence of toxic gases, vapors, or fumes within the WWF in a quantity that may cause acute worker health and safety problems.

(h) Any wastewater containing any toxic pollutants, chemical elements, or compounds in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans, including wastewater plant and collection system operators, or animals, create a toxic effect in the receiving waters of the WWF, or to exceed the limitation set forth in a categorical pretreatment standard. A toxic pollutant shall include, but not be limited to, any pollutant identified pursuant to section 307(a) of the Act.

(i) Any trucked or hauled pollutants except at discharge points designated by the WWF.

(j) Any substance which may cause the WWF's effluent or any other product of the WWF such as residues, sludges, or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the WWF cause the WWF to be in noncompliance with sludge use or disposal criteria, 40 CFR part 503, guidelines, or regulations developed under section 405 of the Act; any criteria, guidelines, or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, or state criteria applicable to the sludge management method being used.

(k) Any substances which will cause the WWF to violate its NPDES permit or the receiving water quality standards.

(l) Any wastewater causing discoloration of the wastewater treatment plant effluent to the extent that the receiving stream water quality requirements would be violated, such as, but not limited to, dye wastes and vegetable tanning solutions.

(m) Any waters or wastes causing an unusual volume of flow or concentration of waste constituting "slug" as defined herein.

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

(o) Any wastewater which causes a hazard to human life or creates a public nuisance.

(p) Any waters or wastes containing animal or vegetable fats, wax, grease, or oil, whether emulsified or not, which cause accumulations of solidified fat in pipes, lift stations and pumping equipment, or interfere at the treatment plant.

(q) Detergents, surfactants, surface-acting agents or other substances which may cause excessive foaming at the WWF or pass through of foam.

(r) Wastewater causing, alone or in conjunction with other sources, the WWF to fail toxicity tests.

(s) Any stormwater, surface water, groundwater, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer. 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 superintendent and the Tennessee Department of Environment and Conservation. Industrial cooling water or unpolluted process waters may be discharged on approval of the superintendent and the Tennessee Department of Environment and Conservation, to a storm sewer or natural outlet.

(2) Local limits. In addition to the general and specific prohibitions listed in this section, users permitted according to Chapter 2 may be subject to numeric and best management practices as additional restrictions to their wastewater discharge in order to protect the WWF (Cookeville Wastewater Treatment Plant) from interference or protect the receiving waters from pass through contamination.

(3) Restrictions on wastewater strength. No person or user shall discharge wastewater which exceeds the set of standards necessary to protect the Cookeville, Tennessee Wastewater Treatment Plant.

(4) Fats, oils and grease traps and interceptors. (a) Fat, Oil, and Grease (FOG), waste food, and sand interceptors. FOG, waste food and sand interceptors shall be installed when, in the opinion of the superintendent, they are necessary for the proper handling of liquid wastes containing fats, oils, and grease, any flammable wastes, ground food waste, sand, soil, and solids, or other harmful ingredients in excessive amount which impact the wastewater collection system. Such interceptors shall not be required for single family residences, but may be required on multiple family residences. All interceptors shall be of a type and capacity approved by the superintendent, and shall be located as to be readily and easily accessible for cleaning and inspection.

(b) Fat, oil, grease, and food waste. (i) New construction and renovation. Upon construction or renovation, all restaurants, cafeterias, hotels, motels, hospitals, nursing homes, schools, grocery stores, prisons, jails, churches, camps, caterers, manufacturing plants and any other sewer users who discharge applicable waste shall submit a FOG and food waste control plan that will effectively control the discharge of FOG and food waste.

(ii) Existing structures. All existing restaurants, cafeterias, hotels, motels, hospitals, nursing homes, schools, grocery stores, prisons, jails, churches, camps, caterers, manufacturing plants and any other sewer users who discharge applicable waste shall be required to submit a plan for control of FOG and food waste, if and when the superintendent determines that FOG and food waste are causing excessive loading, plugging, damage or potential problems to structures or equipment in the public sewer system.

(iii) Implementation of plan. After approval of the FOG plan by the superintendent the sewer user must:

(A) Implement the plan within a reasonable amount of time; and

(B) Service and maintain the equipment in order to prevent impact upon the sewer collection system and treatment facility. If in the opinion of the superintendent the user continues to impact the collection system and

treatment plan, additional pretreatment may be required, including a requirement to meet numeric limits and have surcharges applied.

(c) Sand, soil, and oil interceptors. All car washes, truck washes, garages, service stations and other sources of sand, soil, and oil shall install effective sand, soil, and oil interceptors. These interceptors shall be sized to effectively remove sand, soil, and oil at the expected flow rates. The interceptors shall be cleaned on a regular basis to prevent impact upon the wastewater collection and treatment system. Owners whose interceptors are deemed to be ineffective by the superintendent may be asked to change the cleaning frequency or to increase the size of the interceptors. Owners or operators of washing facilities will prevent the inflow of rainwater into the sanitary sewers.

(d) Laundries. Commercial laundries shall be equipped with an interceptor with a wire basket or similar device, removable for cleaning, that prevents passage into the sewer system of solids one-half inch (1/2") or larger in size such as strings, rags, buttons, or other solids detrimental to the system.

(e) Control equipment. The equipment of facilities installed to control FOG, food waste, sand and soil, must be designed in accordance with the Tennessee Department of Environment and Conservation engineering standards or applicable city guidelines. Underground equipment shall be tightly sealed to prevent inflow of rainwater and easily accessible to allow regular maintenance. Control equipment shall be maintained by the owner or operator of the facility so as to prevent a stoppage of the public sewer, and the accumulation of FOG in the lines, pump stations and treatment plant. If the city is required to clean out the public sewer lines as a result of a stoppage resulting from poorly maintained control equipment, the property owner shall be required to refund the labor, equipment, materials and overhead costs to the city. Nothing in this subsection shall be construed to prohibit or restrict any other remedy the city has under this chapter, or state or federal law. The city retains the right to inspect and approve installation of control equipment.

(f) Solvents prohibited. The use of degreasing or line cleaning products containing petroleum based solvents is prohibited. The use of other products for the purpose of keeping FOG dissolved or suspended until it has traveled into the collection system of the city is prohibited.

(g) The superintendent may use industrial wastewater discharge permits under § 18-206 to regulate the discharge of fat, oil and grease. (Ord. #533-09, Dec. 2009)

18-210. Enforcement and abatement. Violators of these wastewater regulations may be cited to city court, general sessions court, chancery court, or

other court of competent jurisdiction face fines, have sewer service terminated or the city may seek further remedies as needed to protect the collection system, treatment plant, receiving stream and public health. Repeated or continuous violation of this chapter is declared to be a public nuisance and may result in legal action against the property owner and/or occupant and the service line disconnected from sewer main. Upon notice by the superintendent that a violation has or is occurring, the user shall immediately take steps to stop or correct the violation. The city may take any or all the following remedies:

(1) Cite the user to city or general sessions court, where each day of violation shall constitute a separate offense.

(2) In an emergency situation where the superintendent has determined that immediate action is needed to protect the public health, safety or welfare, a public water supply or the facilities of the sewerage system, the superintendent may discontinue water service or disconnect sewer service.

(3) File a lawsuit in chancery court or any other court of competent jurisdiction seeking damages against the user, and further seeking an injunction prohibiting further violations by user.

(4) Seek further remedies as needed to protect the public health, safety or welfare, the public water supply or the facilities of the sewerage system. (Ord. #533-09, Dec. 2009)

18-211. Validity. This chapter and its provisions shall be valid for all service areas, regions, and sewage works under the jurisdiction of the city. (Ord. #533-09, Dec. 2009)

CHAPTER 3

CROSS-CONNECTIONS, AUXILIARY INTAKES, ETC.¹

SECTION

- 18-301. Definitions.
- 18-302. Regulated.
- 18-303. Statement required.
- 18-304. Violations and penalty.

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

(1) "Auxiliary intake." Any piping connection or other device whereby water may be secured from a source other than that normally used.

(2) "Bypass." Any system of piping or other arrangement whereby the water may be diverted around any part or portion of a water purification plant.

(3) "Cross-connection." Any physical connection whereby the public water supply is connected with any other water supply system, whether public or private, either inside or outside of any building or buildings, in such manner that a flow of water into the public water supply is possible either through the manipulation of valves or because of ineffective check or back-pressure valves, or because of any other arrangement.

(4) "Interconnection." Any system of piping or other arrangement whereby the public water supply is connected directly with a sewer, drain, conduit, pool, storage reservoir, or other device which normally contains sewage or other waste or liquid which would be capable of imparting contamination to the public water supply.

(5) "Person." 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.

(6) "Public water supply." The waterworks system furnishing water to the municipality for general use and which supply is recognized as the public water supply by the Tennessee Department of Health. (1997 Code, § 18-401)

18-302. Regulated. It shall be unlawful for any person to cause a cross-connection, auxiliary intake, bypass, or interconnection 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 Health

¹Municipal code references

Plumbing code: title 12.

Water and sewer system administration: title 18.

Wastewater treatment: title 18.

and the operation of such cross-connection, auxiliary intake, bypass or interconnection is at all times under the direct supervision of the superintendent of the waterworks of this municipality. (1997 Code, § 18-402)

18-303. Statement required. Any person whose premises are supplied with water from the public water supply and who also has on the same premises a separate source of water supply, or stores water in an uncovered or insanitary storage reservoir from which the water stored therein is circulated through a piping system, shall file with the superintendent of the waterworks a statement of the non-existence of unapproved or unauthorized cross-connections, auxiliary intakes, bypasses, or interconnections. Such statement shall also contain an agreement that no cross-connection, auxiliary intake, bypass, or interconnection will be permitted upon the premises until the construction and operation of same have received the approval of the Tennessee Department of Health, and the operation and maintenance of same have been placed under the direct supervision of the superintendent of the waterworks. (1997 Code, § 18-403)

18-304. Violations and penalty. Any person who now has cross-connections, auxiliary intakes, bypasses, or interconnections in violation of the provisions of this chapter shall be allowed a reasonable time within which to comply with such provisions. After a thorough investigation of existing conditions and an appraisal for the time required to complete the work, the amount of time to be allowed shall be designated by the superintendent of the waterworks. In addition to, or in lieu of any fines and penalties that may be judicially assessed for violations of this chapter, the superintendent of the waterworks shall discontinue the public water supply service at 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 discontinued. (1997 Code, § 18-404)

CHAPTER 4

CROSS-CONNECTION CONTROL PLAN

SECTION

- 18-401. Introduction.
- 18-402. Authority for controlling cross-connections.
- 18-403. Program to be pursued.
- 18-404. Procedures for inspections.
- 18-405. Protective measures required.
- 18-406. Inspection and testing of protective measures.
- 18-407. Premises requiring maximum protective measures.
- 18-408. Testing of protective devices.

18-401. Introduction. (1) Goal. The goal of the City of Algood Water Department is to supply safe water to each and every customer under all foreseeable circumstances. Each instance where water is used improperly so as to create the possibility of backflow threatens the health and safety of our customers and threatens our chances of realizing this goal. The only protection against such occurrences is the elimination of such cross-connections or the isolation of such hazards from the water supply lines by properly installed approved backflow prevention devices.

(2) Plan of action. The City of Algood Water Department is determined to take every reasonable precaution to see that cross-connections are not allowed to contaminate the water being distributed to its customers. This cross-connection plan outlines a program of action designed to control cross-connections within the area served by the water system. This plan is intended to be a practical guide for safeguarding the quality of water distributed from becoming contaminated or polluted through backflow. (Ord. #577-14, March 2014)

18-402. Authority for controlling cross-connections. This chapter prohibits cross-connections within the water system, authorizes the water system to make inspections of the customer's premises, requires that cross-connection hazards be corrected, and provides for enforcement. This chapter expresses a clear determination on the part of the city council that the water system is to be operated free of cross-connections that endanger the health and safety of those depending upon the public water supply. This chapter is considered to be a sound basis for the control of cross-connection hazards by the operating staff and management of the City of Algood Water Department. The provisions contained within this chapter are in keeping with the requirements set forth in *Tennessee Code Annotated*, § 68-221-711 and section 0400-5-1-.17(6) of the Tennessee Department of Environment and Conservation

Rules for governing public water systems. (Ord. #577-14, March 2014, as amended by Ord. #580-14, July 2014)

18-403. Program to be pursued. The City of Algood Water Department has established an active ongoing cross-connection control program. This program will be a continuing effort to locate and correct all existing cross-connection hazards and to discourage the creation of new problems. Safeguarding the quality of water being distributed to our customers is a high priority concern.

(1) Staffing. Personnel who work on the cross-connection control program are recommended to have a valid certification for evaluating and testing of backflow devices and all personnel testing such devices are required to have a valid certification.

(2) Cross-connection surveys. A representative will visit the premises of all customers considered likely to have cross-connections. The various water uses within the premises will be investigated to determine if backflow can occur. Follow-up visits will continue until the threat of backflow has been corrected. In addition, routine visits will be made periodically to determine if backflow prevention measures are maintained, and are functioning properly and that new cross-connections have not been created.

(3) Public awareness efforts. The department recognizes that it is important to inform its customers of the health hazards associated with cross-connections and to acquaint them with the program being pursued to safeguard the quality of water being distributed.

The following measures will also be used to inform our customers about the need to control cross-connections:

(a) Posters displayed periodically at the department.

(b) Personal visits to commercial, industrial, institutional, and agricultural customers to explain the need for controlling cross-connections.

(c) Whenever possible, any such potential customer will be informed of needed cross-connection measures in the design or construction stage.

(4) Customer's responsibility. Cross-connections, created and maintained by the customer for his convenience, endanger the health and safety of all who depend upon the public water supply. Therefore, the customer who creates a cross-connection problem shall bear the expense of providing necessary backflow protection and for keeping the protective measures in good working order and informing the department of any changes made to the plumbing system.

(5) Enforcement. Where cross-connections are found to exist, the water system will require the problem to be eliminated or isolated by a properly installed, approved backflow prevention device to prevent the possibility of backflow into the distribution system. Such protective measures will include a

backflow protection device on the customer's water service line ahead of any water outlets. Every effort will be made to secure the voluntary cooperation of the customer in correcting cross-connection hazards. If voluntary corrective action cannot be obtained within a reasonable period of time, water service will be discontinued, for the protection of the health and safety of the other customers. (Ord. #577-14, March 2014)

18-404. Procedures for inspections. The department hopes that its efforts to acquaint its customers with the hazards of cross-connections will be successful to the point that the customer will try to maintain their internal water delivery system free of cross-connections. It is recognized that many customers may not recognize that they have a situation that would permit backflow into the water supply lines. Therefore, a thorough investigation will be made of all premises considered likely to have cross-connections. The findings will be discussed with the owner or occupant.

(1) Inspection visits. Most visits will be unannounced, or preceded by a brief notice. Such will usually be the case where:

(a) The establishment is small and no difficulty is expected in locating the occupant or a knowledgeable representative;

(b) Where unannounced visits will not be disruptive; or

(c) Where it is felt that advance notice of the visit would likely result in an unrealistic picture of typical water use practices.

Appointments may be necessary to conduct inspections for other facilities.

(2) Reports to customers. The findings of the investigation will be summarized and discussed with the onsite representative. Cross-connections found will be described briefly along with the recommended method of correction. The discussion will indicate a willingness to assist the customer in working out any details with which he may have questions. The customer will be given a time limit for making the needed corrections. Time for making corrections may vary from thirty to sixty (30-60) days and in some cases ninety (90) days, depending upon the seriousness of the cross-connection involved and upon the complexity and difficulty of correcting the problems.

(3) Follow-up visit and re-inspections. Follow-up visits will be made as needed to assist the customer and to assure that satisfactory progress has been made, if satisfactory progress is not being made a written notice will be given with a dead line for corrections to be made. Such visits will continue until all corrective action has been completed to the satisfaction of the water system.

(4) Installation of backflow prevention devices. Where the customer is asked to install a reduced pressure or double check valve assembly, the customer will be supplied a list of acceptable units, and in addition, minimum acceptable installation criteria, it will be pointed out that a unit cannot be accepted until the department has verified that the installation fully meets the installation criteria and has been tested to verify that the unit is meeting accepted performance standards. Such backflow prevention units must be of a

make and model currently listed as acceptable by the Tennessee Department of Environment and Conservation.

The reduced pressure backflow preventer should be installed with adequate space to facilitate maintenance and testing. No lower than twelve inches (12") from the floor and no higher than sixty inches (60") from the floor and at least six inches (6") from the wall. The water line should be thoroughly flushed to expel all debris prior to installing a reduced pressure backflow prevention device. Debris lodging under one (1) of the check valves is one (1) of the most common causes of trouble with these devices. Therefore, it is highly recommended that a strainer installed upstream of all devices.

The effectiveness of the device is nullified if the relief port is subject to flooding. Therefore, reduced pressure backflow prevention devices must never be installed below ground level or in other locations subject to flooding. The relief valve discharge opening should be located a minimum of twelve inches (12") plus the nominal diameter of the unit above ground level and must never be subject to flooding.

Under no circumstances should the relief discharge opening be plugged. The device depends upon an open relief port for safe operation. Care must also be taken to protect the device from freezing.

(5) Technical assistance. The customer will be urged to notify the water system when they are ready to begin installing either a reduced pressure or double check valve type backflow preventer device. The department's cross-connection representative can visit the site to detail how the units must be installed to achieve the desired protection and to minimize maintenance and testing problems. (Ord. #577-14, March 2014)

18-405. Protective measures required. (1) Main line protection. Main line protection, or protective devices on the customer's service line, will be required on all premises where the water system has reservations that anything less could compromise the goal of the water system to deliver safe water under all foreseeable circumstances to all of its customers.

(2) Acceptable protective devices. All backflow prevention devices used for the protection of the water system must be of a make and model acceptable to the department. All such devices will be installed at a location and in a manner approved by the department and shall meet the minimum standards established by the water system and the Tennessee Department of Health and Environment. (Ord. #577-14, March 2014)

18-406. Inspection and testing of protective measures.

(1) Approval of new installations. The department will not consider the installation of protective measures to be complete until:

(a) The installation has been inspected and approved by the water system; and

(b) Where applicable, tested to determine that the protective device meets acceptable performance standards.

(2) Routine inspection and testing of protective measures. To assure that all protective devices are functioning properly, they must be inspected and tested within a reasonable time frame by an assembly tester with a valid certification in testing and evaluation backflow prevention assemblies issued by the State of Tennessee using certified equipment.

(3) Routine revisits. In conjunction with visits for testing and backflow prevention devices, the water system's representatives will investigate to determine that cross-connections, actual or potential, have not been added ahead of the protective device and that the protection has not been bypassed or altered in some other way that would compromise the desired protection.

Where service line protection is not in place, the system's cross-connection control representative will make a complete inspection of the internal plumbing system and all water uses. Where only internal devices are utilized for the protection of the public water system and the occupants, a thorough investigation will be made of all water uses from the supply side of the protective devices. It is the department's goal to make such inspections at least annually.

(4) Re-inspection of premises where:

(a) Cross-connections were not found previously but are likely to be created.

(b) Plumbing and equipment modifications have been made or are likely to be made will be scheduled for re-inspection approximately one (1) year from the previous visit, or more often to assure that the water system is still properly protected. During such repeat inspections, the water system's representative will make a thorough evaluation of each water use within the premises to detect any cross-connections that may have been created between visits. (Ord. #577-14, March 2014)

18-407. Premises requiring maximum protective measures.

(1) Because of the high degree of hazards involved in the following types of establishments, it is deemed essential that maximum protection, consisting of an air-gap separation or a reduced pressure type backflow preventer or other device meeting the requirements of plumbing code which has been adopted by city:

(a) Mortuaries, morgues, or autopsy facilities.

(b) Hospitals, medical buildings, animal hospitals, doctor, and dental offices.

(c) Sewage treatment, water treatment, and pumping facilities.

(d) Premises with auxiliary water supplies or industrial piping systems.

(e) Chemical plants (manufacturing, processing, compounding, or treatment).

- (f) Laboratories (industrial, commercial, schools).
- (g) Packing houses and rendering plants.
- (h) Manufacturing plants.
- (i) Food and beverage processing plants.
- (j) Car wash facilities.
- (k) Exterminating companies.
- (l) Airports, railroads, bus terminals, piers, boat docks with fueling or washing facilities.
- (m) Bulk distributors, storage facilities and users of pesticides, herbicides, liquid fertilizers, etc.
- (n) Metal plating, pickling, and anodizing operations.
- (o) Dry cleaners.
- (p) Film laboratories.
- (q) Petroleum processing and storage plants.
- (r) Restricted establishments.
- (s) Penal institutions and jails.
- (t) Nursing homes.
- (u) Schools.
- (v) Multistory buildings with water booster pumps.
- (w) Irrigation with chemical injection (commercial and residential).
- (x) Facilities with treated water for boilers, fire systems, chilled water systems, etc.
- (y) Facilities with water from public systems stored in unapproved facilities, or from facilities that may not receive adequate circulation to maintain the desired free chlorine residual, or be degraded in any other manner.
- (z) Others (as found present).

(2) Facilities to be evaluated on a case-by-case basis for required protection to be determined by the department. (Facilities that would only be classified as a high hazard due to a carbonated beverage machine will not be classified as such if the machine meets the requirements of the plumbing code referencing the American Society of Sanitary Engineers (ASSE) 1022 - Performance requirements for backflow preventer for carbonated beverage machines.)

- (a) Agricultural (farms and dairies).
- (b) Service stations.
- (c) Beauty parlor, barber shops, beauty and barber schools.
- (d) Shopping centers.
- (e) Mobile home parks, recreational vehicle parks, campgrounds.
- (f) Swimming pools, recreational areas, parks.
- (g) Restaurants, convenience marts, and facilities with food preparation.

- (h) Hotels and motels.
- (i) Processing facilities for sand, gravel, concrete, etc.
- (j) Buildings over two (2) stories (excluding basements).
- (k) Greenhouses and nurseries.
- (l) Convalescent homes, sanitariums.
- (m) Others (as found present).

(3) The Tennessee Division of Water Supply has approved the use of Double Check-Detector Check Valve Assemblies (DCDA) for installation only on certain private fire service lines. Reduced pressure backflow prevention devices are to continue to be used for domestic and process service lines as well as auxiliary intakes, and fire sprinkler systems that use antifreeze and/or additives. (Ord. #577-14, March 2014)

18-408. Testing of protective devices. The department recognizes that it is essential that qualified individuals holding a valid certification and using approved test equipment and test procedures test continuous pressure type backflow prevention devices on a regular basis if the devices are to be relied upon. It is recognized that the devices can fail to meet the performance standards of which they were designed due to fouling, wear, or mechanical problems. Routine testing and proper maintenance is considered essential for proper operation. It is noted that there are numerous backflow protection devices in facilities that in the city's opinion are not required, such as a retail shop. If the city is not requiring the device it will not be responsible for tracking and/or testing the device.

(1) (a) Routine testing of backflow prevention devices. All reduced pressure backflow prevention devices utilized for the protection of the department will be tested routinely by a trained certified tester in keeping with the following criteria:

- (i) Immediately following installation.
- (ii) At least annually where high hazards are involved.

Devices installed at facilities that the department does not see a need for the device installed may not be inspected by the department.

(iii) Any time protective devices have been partially disassembled for cleaning and/or repairs.

(iv) Where there is indication that the unit may not be functioning properly (i.e., excessive or continuous discharges from relief valve, chatter or vibration or internal parts).

(b) Double check valves or double check-detector valve assemblies will be tested by the fire sprinkler company contracted by the owner of the facility in keeping with the following criteria:

- (i) Immediately following installation.
- (ii) At least annually and more frequently where high hazards are involved.

(iii) Any time devices have been disassembled for cleaning or repairs.

(2) Accepted test procedures. Will be performed using the latest test procedures accepted by the division of water supply.

(3) Repairs. Should a protective device be found defective (not meeting above referenced performance standards), the water system will require the device to be repaired promptly and placed in proper operating condition. Following repairs, the device is to be tested again to verify that it is meeting performance standards. Cleaning is not considered a repair. The owner will be held responsible for maintaining protective measure in a good state of repair. The owner of a device needing repairs or maintenance will be permitted to do the work, if such owner is properly qualified or the owner may elect to secure the services of someone else experienced in the repair of the devices and only with approved parts.

(4) Official tests. Since the department is vitally interested in the proper performance of backflow prevention devices, only tests performed by experienced certified testers approved by the department or by the department's cross-connection personnel will be considered official tests. Approved testers must hand a copy of their certification and test kit information on file with the department. No third party testing is considered official tests until the testing documentation is submitted to the department.

(5) Prior arrangements for testing. Prior arrangements will be made for a mutually agreeable time for testing the devices prior to actually making the test. In all cases, the time which water service is interrupted will be held to a minimum in order to minimize the inconvenience to the customer. The customer, upon notification by the water system, has an obligation to work out a mutually agreeable time for testing protective devices within fourteen (14) days.

(6) Parallel units. The water system may require the installation of parallel units if the customer cannot readily accommodate interruptions of water service for periodic testing and repairs of the backflow prevention device or is unwilling to cooperate in scheduling a shutdown promptly for testing during normal hours worked by water system personnel.

(7) Records. Good records are invaluable in the water system's efforts to safeguard the quality of water being distributed against degradation from backflow through cross-connections. Adequate records will be maintained for at least five (5) years. (Ord. #577-14, March 2014)