TITLE 18

WATER AND SEWERS¹

CHAPTER

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- 2. SEWER USE AND WASTEWATER TREATMENT.
- 3. CROSS CONNECTIONS, AUXILIARY INTAKES, ETC.
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CHAPTER 1

WATER AND SEWERS

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¹Municipal code reference Refuse disposal: title 17.

- **18-101. Application and scope**. The provisions of this chapter are a part of all contracts for receiving water and sewer service from the city and shall apply whether the service is based upon contract, agreement, signed application, or otherwise. (1989 Code, § 13-101)
- **18-102.** <u>Definitions</u>. (1) "Customer" means any person, firm, or corporation who receives water and/or sewer service from the city under either an express or implied contract.
- (2) "Service line" shall consist of the pipe line extending from any water or sewer main of the city 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 city's water main to and including the meter and meter box.
- (3) "Dwelling" means any single structure, with auxiliary buildings, occupied by one or more persons or households for residential purposes.
- (4) "Premise" means any structure or group of structures operated as a single business or enterprise, provided, however, the term "premise" shall not include more than one (1) dwelling. (1989 Code, § 13-102)
- 18-103. Application and contract for service. Each prospective customer desiring water and/or sewer service and who is the owner of the premises for which service is desired shall be required to sign a standard form contract and pay a service deposit of \$20.00 before service is supplied. Prospective customers who are renters of the premises for which service is desired shall sign a standard form contract and pay a service deposit of \$50.00 before service is supplied. The service deposit shall be refundable if and only if the city cannot supply service in accordance with the terms of this chapter. If, for any reason, a customer, after signing a contract for service, does not take such service by reason of not occupying the premises or otherwise, he shall reimburse the city for the expense incurred by reason of its endeavor to furnish such service.

The receipt of a prospective customer's application for service shall not obligate the city to render the service applied for. If the service applied for cannot be supplied in accordance with the provisions of this chapter, the liability of the city to the applicant shall be limited to the return of any deposit made by such applicant. (1989 Code, § 13-103)

18-104. <u>Service charges for temporary service</u>. 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. (1989 Code, § 13-104)

18-105. Connection charges. Service lines will be laid by the city 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 city.

Before a new water or sewer service line will be laid by the city, the applicant shall pay a nonrefundable connection charge of \$175.00.

When a service line is completed, the city 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 city. 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. (1989 Code, § 13-105)

18-106. Water and sewer main extensions. Persons desiring water and/or sewer main extensions must pay all of the cost of making such extensions.

All such extensions shall be installed either by city forces or by other forces working directly under the supervision of the city 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 city, such water and/or sewer mains shall become the property of the city. The persons paying the cost of constructing such mains shall execute any written instruments requested by the city to provide evidence of the city's title to such mains. In consideration of such mains being transferred to it, the city 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. (1989 Code, § 13-106)

18-107. Water and sewer main extension variances. Whenever the board of mayor and aldermen is of the opinion that it is to the best interest of the city 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 board of mayor and aldermen.

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 city to make such extensions or to furnish service to any person or persons. (1989 Code, § 13-107)

Construction of building sewers: title 18, chapter 2.

¹Municipal code reference

18-108. Meters. All meters shall be installed, tested, repaired, and removed only by the city.

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 city. 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. (1989 Code, § 13-108)

18-109. <u>Multiple services through a single meter</u>. No customer shall supply water service to more than one dwelling or premise from a single service line and meter without first obtaining the written permission of the city.

Where the city allows more than one dwelling or premise 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 premise served. The water and/or sewer charges for each such dwelling or premise thus served shall be computed just as if each such dwelling or premise had received through a separately metered service the amount of water so allocated to it, such computation to be made at the city's applicable water schedule, including the provisions as to minimum bills. The separate charges for each dwelling or premise 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. (1989 Code, § 13-109)

18-110. <u>Customer billing and payment policy</u>. Water and sewer bills shall be rendered monthly and shall be paid on or before the 15th day of the month. Bills paid after the 15th day of the month shall be subject to a 10% penalty. Failure to receive a bill shall not release a customer from payment obligation.

Payment must be received in the water and sewer department no later than 4:30 P.M. on the due date. If the due date falls on Saturday, Sunday, or a holiday, net payment will be accepted if paid on the next business day no later than 4:30 P.M.

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 city reserves the right to render an estimated bill based on the best information available. (1989 Code, § 13-110)

- **18-111.** <u>Termination or refusal of service</u>. (1) <u>Basis of termination or refusal</u>. The city shall have the right to discontinue water and sewer service or to refuse to connect service for a violation of, or a failure to comply with, any of the following:
 - (a) These rules and regulations, including the nonpayment of bills.

- (b) The customer's application for service.
- (c) The customer's contract for service.

The right to discontinue service shall apply to all water and sewer service received through collective single connections or services, 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 such customer or tenant.

- (2) <u>Termination of service</u>. Reasonable written notice shall be given to the customer before termination of water service according to the following terms and conditions:
 - (a) Written notice of termination (cut-off) shall be given to the customer at least five (5) days prior to the scheduled date of termination. The cut-off notice shall specify the reason for the cut-off, and
 - (i) The amount due, including other charges.
 - (ii) The last date to avoid service termination.
 - (iii) Notification of the customer's right to a hearing prior to service termination.
 - (b) In the case of termination for nonpayment of bills, the employee carrying out the termination procedure will attempt before disconnecting service to contact the customer at the premises in a final effort to collect payment and avoid termination.
 - (c) Hearings for service termination, including for nonpayment of bills, will be held by appointment.
 - (d) Termination will not be made on any preceding day when the water and sewer department is scheduled to be closed.
 - (e) If a customer does not request a hearing, or, in the case of nonpayment of a bill, does not make payment of the bill, or does not otherwise correct the problem that resulted in the notice of termination in a manner satisfactory to the water and sewer department, the same shall proceed on schedule with service termination.
 - (f) Service termination for any reason shall be reconnected only after the payment of all charges due or satisfactory arrangements for payment have been made, or the correction of the problem that resulted in the termination of service in a manner satisfactory to the water and sewer department, plus the payment of a reconnection charge of \$20.00. (1989 Code, § 13-111)
- 18-112. <u>Termination of service by customer</u>. 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 city 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 city 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 city 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 city 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. (1989 Code, § 13-112)
- 18-113. Access to customers' premises. The city'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 city, and for inspecting customers' plumbing and premises generally in order to secure compliance with these rules and regulations. (1989 Code, § 13-113)
- 18-114. <u>Inspections</u>. The city 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 city reserves the right to refuse service or to discontinue service to any premises not in compliance with any special contract, these rules and regulations, or other requirements of the city.

Any failure to inspect or reject a customer's installation or plumbing system shall not render the city liable or responsible for any loss or damage which might have been avoided, had such inspection or rejection been made. (1989 Code, § 13-114)

18-115. <u>Customer's responsibility for system's property</u>. Except as herein elsewhere expressly provided, all meters, service connections, and other equipment furnished by or for the city shall be and remain the property of the city. Each customer shall provide space for and exercise proper care to protect the property of the city on his premises. In the event of loss or damage to such property arising from the neglect of a customer to care for it properly, the cost

of necessary repairs or replacements shall be paid by the customer. (1989 Code, § 13-115)

- 18-116. <u>Customer's responsibility for violations</u>. Where the city 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. (1989 Code, § 13-116)
- 18-117. <u>Supply and resale of water</u>. All water shall be supplied within the city exclusively by the city 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 city. (1989 Code, § 13-117)
- 18-118. <u>Unauthorized use of or interference with water supply</u>. No person shall turn on or turn off any of the city's stop cocks, valves, hydrants, spigots, or fire plugs without permission or authority from the city. (1989 Code, § 13-118)
- 18-119. <u>Limited use of unmetered private fire line</u>. 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 city.

All private fire hydrants shall be sealed by the city, 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 city a written notice of such occurrence. (1989 Code, § 13-119)

- 18-120. <u>Damages to property due to water pressure</u>. The city 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 city's water mains. (1989 Code, § 13-120)
- **18-121.** <u>Liability for cutoff failures</u>. The city'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 city has failed to cut off such service.
- (2) The city has attempted to cut off a service but such service has not been completely cut off.

(3) The city 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 city main.

Except to the extent stated above, the city 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 city's cutoff. Also the customer (and not the city) shall be responsible for seeing that his plumbing is properly drained and is kept properly drained, after his water service has been cut off. (1989 Code, § 13-121)

- 18-122. <u>Restricted use of water</u>. In times of emergencies or in times of water shortage, the city 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. (1989 Code, § 13-122)
- **18-123.** <u>Interruption of service</u>. The city will endeavor to furnish continuous water and sewer service, but does not guarantee to the customer any fixed pressure or continuous service. The city shall not be liable for any damages for any interruption of service whatsoever.

In connection with the operation, maintenance, repair, and extension of the municipal water and sewer systems, the water supply may be shut off without notice when necessary or desirable and each customer must be prepared for such emergencies. The city shall not be liable for any damages from such interruption of service or for damages from the resumption of service without notice after any such interruption. (1989 Code, § 13-123)

18-124. <u>Schedule of rates</u>. All water and sewer service shall be furnished under such rate schedules as the city may from time to time adopt by appropriate ordinance or resolution.¹ (1989 Code, § 13-124)

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

CHAPTER 2

SEWER USE AND WASTEWATER TREATMENT

SECTION

- 18-201. Definitions.
- 18-202. Connection to public sewers.
- 18-203. Private domestic wastewater disposal.
- 18-204. Regulation of holding tank waste disposal.
- 18-205. Application for domestic wastewater discharge and industrial wastewater discharge permits.
- 18-206. Discharge regulations.
- 18-207. Industrial user monitoring, inspection reports, records access, and safety.
- 18-208. Enforcement and abatement.
- 18-209. Fees and billing.
- 18-201. <u>Definitions</u>. 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 33 U.S.C. 1251, et seq.
- (2) "Approval authority" The director in an NPDES state with an approved State Pretreatment Program and the Administrator of the EPA in a non-NPDES state or NPDES state without an Approved State Pretreatment Program.
- (3) "Authorized representative of industrial user" An authorized representative of an industrial user may be:
 - (a) A principal executive officer of at least the level of vice-president, if the industrial user is a corporation;
 - (b) A general partner or proprietor if the industrial user is a partnership or proprietorship, respectively;
 - (c) A duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facilities from which the indirect discharge originates.
- (4) "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 20° centigrade expressed in terms of weight and concentration (milligrams per liter (mg/l)).
- (5) "Building sewer" A sewer conveying wastewater from the premises of a user to the POTW.
- (6) "Categorical standards" The National Categorical Pretreatment Standards or Pretreatment Standard.

- (7) "City" The City of Puryear or the Board of Mayor and Aldermen, City of Puryear, Tennessee.
- (8) "Compatible pollutant" Shall mean 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 city's NPDES permit for its wastewater treatment works where sewer works have been designed and used to reduce or remove such pollutants.
- (9) "Cooling water" The water discharge from any use such as air conditioning, cooling, or refrigeration, or to which the only pollutant added is heat.
- (10) "Control authority" The term "control authority" shall refer to the "approval authority," defined hereinabove; or the board of mayor and aldermen if the city has an approved pretreatment program under the provisions of 40 CFR 403.11.
- (11) "Customer" Means 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.
- (12) "Direct discharge" The discharge of treated or untreated wastewater directly to the waters of the State of Tennessee.
- (13) "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.
- (14) "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.
- (15) "Garbage" Shall mean solid wastes generated from any domestic, commercial or industrial source.
- (16) "Grab sample" A sample which is taken from a waste stream on a one-time basis with no regard to the flow in the waste stream and without consideration of time.
- (17) "Holding tank waste" Any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks, and vacuum-pump tank trucks.
- (18) "Incompatible pollutant" Shall mean any pollutant which is not a "compatible pollutant" as defined in this section.
- (19) "Indirect discharge" The discharge or the introduction of non-domestic pollutants from any source regulated under Section 307(b) or (c) of the Act, (33 U.S.C. 1317), into the POTW (including holding tank waste discharged into the system).
- (20) "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).

- (21) "Interference" The inhibition or disruption of the municipal wastewater processes or operations which contributes to a violation of any requirement of the city's NPDES permit. The term includes prevention of sewage sludge use or disposal by the POTW in accordance with Section 405 of the Act, (33 U.S.C. 1345) or any criteria, guidelines, or regulations developed pursuant to the Solid Waste Disposal Act (SWDA), the Clean Air Act, the Toxic Substances Control Act, or more stringent state criteria (including those contained in any state sludge management plan prepared pursuant to Title IV of SWDA) applicable to the method of disposal or use employed by the municipal wastewater treatment system.
- (22) "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.
- (23) "NPDES (National Pollution Discharge Elimination System)" Shall mean 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 Federal Water Pollution Control Act as amended.
- (24) "New source" Any source, the construction of which is commenced after the publication of proposed regulations prescribing a Section 307(c) (33 U.S.C. 1317) categorical pretreatment standard which will be applicable to such source, if such standard is thereafter promulgated within 120 days of proposal in the Federal Register. Where the standard is promulgated later than 120 days after proposal, a new source means any source, the construction of which is commenced after the date of promulgation of the standard.
- (25) "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.
- (26) "pH" The logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in grams per liter of solution.
- (27) "Pollution" The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.
- (28) "Pollutant" Any dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharge into water.
- (29) "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 as prohibited by 40 CFR Section 40.36(d).

- (30) "Pretreatment requirements" Any substantive or procedural requirement related to pretreatment other than a national pretreatment standard imposed on an industrial user.
- (31) "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 city. This definition includes any sewers that convey wastewater to the POTW treatment plant, but does not include pipes, sewers or other conveyances not connected to a facility providing treatment. For the purposes of this chapter, "POTW" shall also include any sewers that convey wastewaters to the POTW from persons outside the city who are, by contract or agreement with users of the city's POTW.
- (32) "POTW treatment plant" That portion of the POTW designed to provide treatment to wastewater.
 - (33) "Shall" is mandatory; "May" is permissive.
- (34) "Slug" Shall mean any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentrations of flows during normal operation or any discharge of whatever duration that causes the sewer to overflow or back up in an objectionable way or any discharge of whatever duration that interferes with the proper operation of the wastewater treatment facilities or pumping stations.
 - (35) "State" The State of Tennessee.
- (36) "Standard industrial classification (SIC)" A classification pursuant to the <u>Standard Industrial Classification Manual</u> issued by the Executive Office of the President, Office of Management and Budget, 1972.
- (37) "Storm water" Any flow occurring during or following any form of natural precipitation and resulting therefrom.
- (38) "Storm sewer or storm drain" Shall mean 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 city.
- (39) "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.
- (40) "Superintendent" The mayor 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.

- (41) "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.
- (42) "Twenty-four (24) hour flow proportional composite sample" A sample consisting of several sample portions collected during a 24-hour period in which the portions of a sample are proportioned to the flow and combined to form a representative sample.
- (43) "User" Any person who contributes, causes or permits the contribution of wastewater into the city's POTW.
- (44) "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 POTW.
 - (45) "Wastewater treatment systems" Defined the same as POTW.
- (46) "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. (1989 Code, § 8-301)
- 18-202. <u>Connection to public sewers</u>. (1) <u>Requirements for proper wastewater disposal</u>. (a) 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 of Puryear, any human or animal excrement, garbage, or other objectionable waste.
 - (b) 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.
 - (c) Except as herein provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of sewage.
 - (d) Except as provided in § 18-202(1)(e) 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 public sewer in accordance with the provisions of the chapter, within sixty (60) days after date of official notice to do so, provided that said public sewer is within five hundred (500) feet of the property line over public access.
 - (e) 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.

- (f) Where a public sanitary sewer is not available under the provisions of § 18-202(1)(d) above, the building sewer shall be connected to a private sewage disposal system complying with the provisions of § 18-203 of this chapter.
- (2) <u>Physical connection public sewer</u>. (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 obtaining a written permit from the city as required by § 18-205 of this chapter.

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

- (b) All costs and expenses incident to the installation, connection, and inspection of the building sewer shall be borne by the owner. 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 building; except where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard, or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.
- (d) Old building sewers may be used in connection with new buildings only when they are found, on examination and tested by the city to meet all requirements of this chapter. All others may be sealed to the specifications of the city.
 - (e) Building sewers shall conform to the following requirements:
 - (i) The minimum size of a building sewer shall be as follows:

Conventional sewer system - Four inches (4").

Small diameter gravity sewer - Two inches (2").

Septic Tank Effluent Pump - One and one quarter inches $(1\frac{1}{4})$.

Where the septic tank becomes an integral part of the collection and treatment system, the minimum size influent line shall be four inches (4") and the minimum size of septic tank shall be 1,000 gallons. Septic tanks shall be constructed of polyethylene and protected from flotation. The city shall have the right, privilege, and authority to locate, inspect, operate, and maintain

septic tanks which are an integral part of the collection and treatment system.

- (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 1/8 inch per foot.

Two inch (2") sewers - 3/8 inch per foot.

Larger building sewers shall be laid on a grade that will produce a velocity when flowing full of at least 2.0 feet per second.

- (iv) Slope and alignment of all building sewers shall be neat and regular.
- (v) Building sewers shall be constructed only of ductile iron pipe class 50 or above or polyvinyl chloride pipe SDR-35 for gravity sewers and SDR-21 for pressure sewers. Joints shall be rubber or neoprene "o" ring compression joints. No other joints shall be acceptable.
- (vi) A cleanout shall be located five (5) feet outside of the building, one as it crosses the property line and one at each change of direction of the building sewer which is greater than 45 degrees. Additional cleanouts shall be placed not more than seventy-five (75) feet apart in horizontal building sewers of six (6) inch nominal diameter and not more than one hundred (100) feet apart for larger pipes. Cleanouts shall be extended to or above the finished grade level directly above the place where the cleanout is installed. A "Y" (wye) and 1/8 bend shall be used for the cleanout base. Cleanouts shall not be smaller than four (4) inches.
- (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 sewers 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 city. All such connections shall be made gastight and watertight.
- (viii) The building sewer may be brought into the building below the basement floor when gravity flow from the building to the sanitary sewer is at a grade of 1/18-inch per foot or more if possible. In cases where basement or floor levels are lower than the ground elevation at the point of connection to the sewer, adequate precautions by installation of check valves or other backflow prevention devices to protect against flooding shall be provided by the owner. 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 a pump 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 of the ASTM and Water Pollution Control Federal Manual of Practice No. 9. Any deviation from the prescribed procedures and materials must be approved by the city 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, or other sources of surface runoff or groundwater to a building directly or indirectly to a public sanitary sewer.
- (3) <u>Inspection of connections</u>. (a) 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 mayor or his authorized representative.
- (b) The applicant for discharge shall notify the city when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the mayor or his representative.
- (4) <u>Maintenance of building sewers</u>. Each individual property owner or user of the POTW shall be entirely responsible for the maintenance which will include repair or replacement of the building sewer as deemed necessary by the city to meet specifications of the city. (1989 Code, § 8-302)

18-203. Private domestic wastewater disposal. (1) Availability.

- (a) Where a public sanitary sewer is not available under the provisions of § 18-202(1)(d), the building sewer shall be connected to a private wastewater disposal system complying with the provisions of this section.
- (b) Any residence, office, recreational facility, or other establishment used for human occupancy where the building drain is below the elevation to obtain a grade equivalent to 1/18-inch per foot in

the building sewer but is otherwise accessible to a public sewer as provided in § 18-202, the owner shall provide a private sewage pumping station as provided in § 18-202(2)(e)(viii).

- (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) A private domestic wastewater disposal system may not be constructed within the service area unless and until a certificate is obtained from the city stating that a public sewer is not accessible to the property and no such sewer is proposed for construction in the immediate future. No certificate shall be issued for any private domestic wastewater disposal system employing subsurface soil absorption facilities where the area of the lot is less than that specified by the County Health Department.
- (b) Before commencement of construction of a private sewage disposal system the owner shall first obtain written permission from the city and the Henry County Health Department. The owner shall supply any plans, specifications, and other information as are deemed necessary by the city and the Henry County Health Department.
- (c) A private sewage disposal system shall not be placed in operation until the installation is completed to the satisfaction of the city and the Henry County Health Department. They shall be allowed to inspect the work at any stage of construction and the owner shall notify the city and the Henry County Health Department when the work is ready for final inspection, before any underground portions are covered. The inspection shall be made within a reasonable period of time after the receipt of notice by the city and the Henry County Health Department.
- (d) The type, capacity, location, and layout of a private sewage disposal system shall comply with all recommendations of the Department of Health of the State of Tennessee, the city, and the Henry County Health Department. No septic tank or cesspool shall be permitted to discharge to waters of Tennessee.
- (e) 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 the public sewer becomes available, the building sewer, or the septic tank effluent line shall be connected to the public sewer within sixty (60) days of the date of availability and the private sewage disposal system should be cleaned of sludge and if no longer used as a part of the city's treatment system, filled with suitable material. (1989 Code, § 8-303)

18-204. Regulation of holding tank waste disposal.

(1) <u>Permit</u>. No person, firm, association or corporation shall clean out, drain, or flush any septic tank or any other type of wastewater or excreta

disposal system, unless such person, firm, association, or corporation obtains a permit 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 city when the conditions of this chapter have been met and providing the city is satisfied the applicant has adequate and proper equipment to perform the services contemplated in a safe and competent manner. Such permits shall be limited to the discharge of domestic sewage waste containing no industrial waste.

- (2) <u>Fees</u>. 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 § 18-209. Any such permit granted shall be for one fiscal year or fraction of the fiscal year, and shall continue in full force and effect from the time issued until the ending of the fiscal year, unless sooner revoked, and shall be nontransferable. The number of the permit granted hereunder shall be plainly painted 3-inch permanent letters on each side of each motor vehicle used in the conduct of the business permitted hereunder.
- (3) <u>Designated disposal locations</u>. The city 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 city may refuse to accept any truckload of waste at his absolute discretion where it appears that the waste could interfere with the operation of the POTW.
- (4) Revocation of permit. Failure to comply with all the provisions of this chapter shall be sufficient cause for the revocation of such permit by the city. 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. (1989 Code, § 8-304)

18-205. Application for domestic wastewater discharge and industrial wastewater discharge permits. (1) Application for discharge of domestic wastewater. All users or prospective users which generate domestic wastewater shall make application to the city for written authorization to discharge to the municipal wastewater treatment system. Applications shall be required from all new dischargers as well as for any existing discharger desiring additional service. Connection to the city sewer shall not be made until the application is received and approved by the city, the building sewer is installed in accordance with § 18-201 of this chapter and an inspection has been performed by the mayor or his representative.

The receipt by the city of a prospective customer's application for service shall not obligate the city to render the service. If the service applied for cannot be supplied in accordance with this chapter and the city's rules and regulations and general practice, the connection charge will be refunded in full, and there shall be no liability of the city to the applicant for such service.

- (2) <u>Industrial wastewater discharge permits</u>. (a) <u>General requirements</u>. All industrial users proposing to connect to or to contribute to the POTW shall obtain a wastewater discharge permit before connecting to or contributing to the POTW. All existing industrial users connected to or contributing to the POTW shall acquire a permit within 180 days after the effective date of this chapter.
- (b) <u>Applications</u>. Applications for wastewater discharge permits shall be required as follows:
 - (i) Users required to obtain a wastewater discharge permit shall complete and file with the city, an application on a prescribed form accompanied by the appropriate fee. Existing users shall apply for a wastewater contribution permit within 60 days after the effective date of this chapter, and proposed new users shall apply at least 60 days prior to connecting to or contributing to the POTW.
 - (ii) The application shall be in the prescribed form of the city and shall include, but not be limited to the following information: name, address, and SIC number of applicant; wastewater volume; wastewater constituents and characteristic, including but not limited to those mentioned in §§ 18-206(1) and (2) discharge variations -- daily, monthly, seasonal and 30 minute peaks; a description of all chemicals handled on the premises, each product produced by type, amount, process or processes and rate of production, type and amount of raw materials, number and type of employees, hours of operation, site plans, floor plans, mechanical and plumbing plans and details showing all sewers and appurtenances by size, location and elevation; a description of existing and proposed pretreatment and/or equalization facilities and any other information deemed necessary by the city.
 - (iii) Any user who elects or is required to construct new or additional facilities for pretreatment shall as part of the application for wastewater discharge permit submit plans, specifications and other pertinent information relative to the proposed construction to the city for approval. Plans and specifications submitted for approval must bear the seal of a professional engineer registered to practice engineering in the State of Tennessee. A wastewater discharge permit shall not be issued until such plans and specifications are approved. Approval of such plans and specifications shall in no way relieve the user

from the responsibility of modifying the facility as necessary to produce an effluent acceptable to the city under the provisions of this chapter.

- (iv) If additional pretreatment and/or O&M will be required to meet the pretreatment standards, the application shall include the shortest schedule by which the user will provide such additional pretreatment. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. For the purpose of this paragraph, "pretreatment standard," shall include either a national pretreatment standard or a pretreatment standard imposed by § 18-206 of this chapter.
- (v) The city will evaluate the data furnished by the user and may require additional information. After evaluation and acceptance of the data furnished, the city may issue a wastewater discharge permit subject to terms and conditions provided herein.
- (vi) The receipt by the city of a prospective customer's application for wastewater discharge permit shall not obligate the city to render the wastewater collection and treatment service. If the service applied for cannot be supplied in accordance with this chapter or the city's rules and regulations and general practice, the application shall be rejected and there shall be no liability of the city to the applicant of such service.
- (vii) The city will act only on applications containing all the information required in this section. Persons who have filed incomplete applications will be notified by the city that the application is deficient and the nature of such deficiency and will be given thirty (30) days to correct the deficiency. If the deficiency is not corrected within thirty (30) days or within such extended period as allowed by the city, the city shall deny the application and notify the applicant in writing of such action.
- (c) <u>Permit conditions</u>. Wastewater discharge permits shall be expressly subject to all provisions of this chapter and all other applicable regulations, user charges and fees established by the city. Permits may contain the following:
 - (i) The unit charge or schedule of user charges and fees for the wastewater to be discharged to a community sewer;
 - (ii) Limits on the average and maximum rate and time of discharge or requirements and equalization;
 - (iii) Requirements for installation and maintenance of inspections and sampling facilities;
 - (iv) Specifications for monitoring programs which may include sampling locations, frequency of sampling, number, types, and standards for tests and reporting schedule;

- (v) Compliance schedules;
- (vi) Requirements for submission of technical reports or discharge reports;
- (vii) Requirements for maintaining and retaining plant records relating to wastewater discharge as specified by the city, and affording city access thereto;
- (viii) Requirements for notification of the city of any new introduction of wastewater constituents or any substantial change in the volume or character of the wastewater constituents being introduced into the wastewater treatment system;
 - (ix) Requirements for notification of slug discharged;
- (x) Other conditions as deemed appropriate by the city to ensure compliance with this chapter.
- (d) Permit modifications. Within nine months of the promulgation of a national categorical pretreatment standard, the wastewater discharge permit of users subject to such standards shall be revised to require compliance with such standard within the time frame prescribed by such standard. A user with an existing wastewater discharge permit shall submit to the city within 180 days after the promulgation of an applicable federal categorical pretreatment standard the information required by §§ 18-205(2)(b)(ii) and (iii). The terms and conditions of the permit may be subject to modification by the city during the term of the permit as limitations or requirements are modified or other just cause exists. The user shall be informed of any proposed changes in this permit at least 30 days prior to the effective date of change. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.
- (e) <u>Permit duration</u>. Permits shall be issued for a specified time period, not to exceed five (5) years. A permit may be issued for a period less than a year or may be stated to expire on a specific date. The user shall apply for permit reissuance a minimum of 180 days prior to the expiration of the user's existing permit.
- (f) <u>Permit transfer</u>. Wastewater discharge permits are issued to a specific user for a specific operation. A wastewater discharge permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation without the approval of the city. Any succeeding owner or user shall also comply with the terms and conditions of the existing permit.
- (g) <u>Revocation of permit</u>. Any permit issued under the provisions of the chapter is subject to be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- (i) Violation of any terms or conditions of the wastewater discharge permit or other applicable federal, state, or local law or regulation.
- (ii) Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts.
- (iii) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- (iv) Intentional failure of a user to accurately report the discharge constituents and characteristics or to report significant changes in plant operations or wastewater characteristics.
- (3) <u>Confidential information</u>. All information and data on a user obtained from reports, questionnaire, permit application, permits and monitoring programs and from inspection shall be available to the public or any governmental agency without restriction unless the user specifically requests and is able to demonstrate to the satisfaction of the city that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets of the users.

When requested by the person furnishing the report, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available to governmental agencies for use; related to this chapter or the city's or user's NPDES permit. Provided, however, that such portions of a report shall be available for use by the state or any state agency in judicial review or enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics will not be recognized as confidential information.

Information accepted by the city as confidential shall not be transmitted to any governmental agency or to the general public by the city until and unless prior and adequate notification is given to the user. (1989 Code, § 8-305)

- 18-206. <u>Discharge regulations</u>. (1) <u>General discharge prohibitions</u>. No user shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will interfere with the operation and performance of the POTW. These general prohibitions apply to all such users of a POTW whether or not the user is subject to national categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements. A user may not contribute the following substances to any POTW:
 - (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 POTW or to the operation of the POTW. At no time, shall two successive readings on an explosion hazard meter, at the point of

discharge into the system (or at any point in the system) be more than five percent (5%) nor any single reading over ten percent (10%) of the lower explosive limit (LEL) of the meter. 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) 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 but not limited to: grease, garbage with particles greater than one-half inch (1/2") in any dimension, paunch manure, bones, hair, hides, or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues from refining, or processing of fuel or lubricating oil, mud, or glass grinding or polishing wastes.
- (c) 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 POTW.
- (d) 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 or animals, create a toxic effect in the receiving waters of the POTW, 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.
- (e) Any noxious or malodorous liquids, gases, or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance, hazard to life, are sufficient to prevent entry into the sewers for maintenance and repair.
- (f) Any substance which may cause the POTW's effluent or any other product of the POTW 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 POTW cause the POTW to be in non-compliance with sludge use or 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.

- (g) Any substances which will cause the POTW to violate its NPDES permit or the receiving water quality standards.
- (h) 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.
- (i) Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the sewer system which exceeds 65°C (150°F) or causes the influent at the wastewater plant to exceed 40°C (104°F).
- (j) Any pollutants, including oxygen demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which a user knows or has reason to know will cause interference to the POTW.
- (k) Any waters or wastes causing an unusual volume of flow or concentration of waste constituting "slug" as defined herein.
- (l) Any waters containing any radioactive wastes or isotopes of such halflife or concentration as may exceed limits established by the city in compliance with applicable state or federal regulations.
- (m) Any wastewater which causes a hazard to human life or creates a public nuisance.
- (n) Any waters or wastes containing fats, wax, grease, or oil, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperature between thirty-two (32) or one hundred fifty (150) degrees F (0 and 65°C).
- (o) 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 city and the Tennessee Department of Health. Industrial cooling water or unpolluted process waters may be discharged on approval of the city and the Tennessee Department of Health, to a storm sewer or natural outlet.
- (2) <u>Restrictions on wastewater strength</u>. No person or user shall discharge wastewater which exceeds the following set of standards (Table A User Discharge Restrictions) unless an exception is permitted as provided in this chapter. Dilution of any wastewater discharge for the purpose of satisfying these requirements shall be considered in violation of this chapter.

Table A - User Discharge Restrictions

Pollutant	Daily Average* Maximum Concentration (mg/l)	Instantaneous Maximum Concentration (mg/l)
Antimony	5.0	8.0
Arsenic	1.0	1.5
Cadmium	1.0	1.5
Chromium (total)	4.0	7.0
Copper	3.0	5.0
Cyanide	1.0	2.0
Lead	1.0	1.5
Mercury	0.1	0.2
Nickel	3.0	4.5
Pesticides &		
Herbicides	BDL	1.0
Phenols	10.0	15.0
Selenium	1.0	1.5
Silver	1.0	1.5
Surfactants,		
as MBAS	25.0	50.0
Zinc	3.0	5.0

(3) Protection of treatment plant influent. The city shall monitor the treatment works influent for each parameter in the following table (Table B-Plant Protection Criteria). Industrial users shall be subject to reporting and monitoring requirements regarding these parameters as set forth in this chapter. In the event that the influent at the POTW reaches or exceeds the levels established by this table, the city shall initiate technical studies to determine the cause of the influent violation and shall recommend to the city the necessary remedial measures, including, but not limited to, recommending the establishment of new or revised pretreatment levels for these parameters. The city shall also recommend changes to any of these criteria in the event that: the POTW effluent standards are changed, there are changes in any applicable law or regulation affecting same, or changes are needed for more effective operation of the POTW.

^{*}Based on 24-hour flow proportional composite samples. BDL = Below Detectable Limits

Table B-Plant Protection Criteria

Maximum Concentration

Parameter	(mg/l) (24 Hour Flow) Proportional Composite Sample	Maximum Instantaneous Concentration (mg/l) Grab Sample
Aluminum		
dissolved (AL)	3.00	6.0
Antimony (Sb)	0.50	1.0
Arsenic (As)	0.06	0.12
Barium (Ba)	2.50	5.0
Boron	0.4	0.8
Cadmium (Cd)	0.004	0.008
Chromium Hex	0.06	0.12
Cobalt	0.03	0.06
Copper (Cu)	0.16	0.32
Cyanide (CN)	0.03	0.06
Fluoride (F)	0.6	1.2
Iron (Fe)	3.0	6.0
Lead (Pb)	0.10	0.2
Manganese (Mn)	0.1	0.2
Mercury (Hg)	0.025	0.05
Nickel (Ni)	0.15	0.30
Pesticides &		
Herbicides	.001	.002
Phenols	1.00	2.0
Selenium (Se)	0.01	0.02
Silver (Ag)	0.05	0.1
Sulfide	25.0	40.0
Zinc (Zn)	0.3	0.6
Total Kjeldahl		
Nitrogen (TKN)	45.00	90.00
Oil & Grease	50.00	100.00
MBAS	5.00	10.0
BOD	220	350
COD	440	700
Suspended Solids	220	350

- (4) <u>Federal categorical pretreatment standards</u>. Upon the promulgation of the federal categorical pretreatment standards for a particular industrial subcategory, the federal standard, if more stringent than limitations imposed under this chapter for sources in that subcategory, shall immediately supersede the limitations imposed under this chapter. The city shall notify all affected users of the applicable reporting requirements under 40 CFR, Section 403.12.
- (5) Right to establish more restrictive criteria. No statement in this chapter is intended or may be construed to prohibit the city from establishing specific wastewater discharge criteria more restrictive where wastes are determined to be harmful or destructive to the facilities of the POTW or to create a public nuisance, or to cause the discharge of the POTW to violate effluent or stream quality standards, or to interfere with the use or handling of sludge, or to pass through the POTW resulting in a violation of the NPDES permit, or to exceed industrial pretreatment standards for discharge to municipal wastewater treatment systems as imposed or as may be imposed by the Tennessee Department of Health and/or the United States Environmental Protection Agency.
 - (6) Accidental discharges. (a) Protection from accidental discharge. All industrial users shall provide such facilities and institute such procedures as are reasonably necessary to prevent or minimize the potential for accidental discharge into the POTW of waste regulated by this chapter from liquid or raw material storage areas, from truck and rail car loading and unloading areas, from in-plant transfer or processing and materials handling areas, and from diked areas or holding ponds of any waste regulated by this chapter. Detailed plans showing the facilities and operating procedures shall be submitted to the city before the facility is constructed.

The review and approval of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the facility to provide the protection necessary to meet the requirements of this chapter.

(b) <u>Notification of accidental discharge</u>. Any person causing or suffering from any accidental discharge shall immediately notify the mayor (or designated official) in person, by the telephone to enable countermeasures to be taken by the city to minimize damage to the POTW, the health and welfare of the public, and the environment.

This notification shall be followed, within five (5) days of the date of occurrence, by a detailed written statement describing the cause of the accidental discharge and the measures being taken to prevent future occurrence.

Such notification shall not relieve the user of liability for any expense, loss, or damage to the POTW, fish kills, or any other damage to

person or property; nor shall such notification relieve the user of any fines, civil penalties, or other liability which may be imposed by this chapter or state or federal law.

(c) Notice to employees. A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees whom to call in the event of a dangerous discharge. Employers shall ensure that all employees who may cause or suffer such a dangerous discharge to occur are advised of the emergency notification procedure. In lieu of placing notices on bulletin boards, the users may submit an approved SPIC. Each user shall annually certify to the city compliance with this paragraph. (1989 Code, § 8-306)

18-207. <u>Industrial user monitoring, inspection reports, records access, and safety</u>. (1) <u>Monitoring facilities</u>. The installation of a monitoring facility shall be required for all industrial users. A monitoring facility shall be a manhole or other suitable facility approved by the city.

When in the judgment of the city, there is a significant difference in wastewater constituents and characteristics produced by different operations of a single user the city may require that separate monitoring facilities be installed for each separate source of discharge.

Monitoring facilities that are required to be installed shall be constructed and maintained at the user's expense. The purpose of the facility is to enable inspection, sampling and flow measurement of wastewater produced by a user. If sampling or metering equipment is also required by the city, it shall be provided and installed at the user's expense.

The monitoring facility will normally be required to be located on the user's premises outside of the building. The city may, however, when such a location would be impractical or cause undue hardship on the user, allow the facility to be constructed in the public street right-of-way with the approval of the public agency having jurisdiction of that right-of-way and located so that it will not be obstructed by landscaping or parked vehicles.

There shall be ample room in or near such sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility, sampling, and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expenses of the user.

(2) <u>Inspection and sampling</u>. The city shall inspect the facilities of any user to ascertain whether the purpose of this chapter is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the city or their representative ready access at all reasonable times to all parts of the premises for the purpose of inspection, sampling, records examination or in the performance of any of their duties. The city, approval authority and EPA shall have the right to set up on the user's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations. Where a user

has security measures in force which would require proper identification and clearance before entry into their premises, the user shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the city, approval authority and EPA will be permitted to enter, without delay, for the purposes of performing their specific responsibility.

- (3) Compliance date report. Within 180 days following the date for final compliance with applicable pretreatment standards or, in the case of a new source, following commencement of the introduction of wastewater into the POTW, any user subject to pretreatment standards and requirements shall submit to the city a report indicating the nature and concentration of all pollutants in the discharge from the regulated process which are limited by pretreatment standards and requirements and the average and maximum daily flow for these process units in the user facility which are limited by such pretreatment standards or requirements. The report shall state whether the applicable pretreatment standards or requirements are being met on a consistent basis and, if not, what additional O&M and/or pretreatment is necessary to bring the user into compliance with the applicable pretreatment standards or requirements. This statement shall be signed by an authorized representative of the industrial user, and certified to by a professional engineer registered to practice engineering in Tennessee.
 - (4) Periodic compliance reports. (a) Any user subject to a pretreatment standard, after the compliance date of such pretreatment standard, or, in the case of a new source, after commencement of the discharge into the POTW, shall submit to the city during the months of June and December, unless required more frequently in the pretreatment standard or by the city, a report indicating the nature and concentration of pollutants in the effluent which are limited by such pretreatment standards and requirements.

In addition, this report shall include a record of all daily flows which during the reporting period exceeded the average daily flow. At the discretion of the city and in consideration of such factors as local high or low flow rates, holidays, budget cycles, etc., the city may agree to alter the months during which the above reports are to be submitted.

- (b) The city may impose mass limitations on users where the imposition of mass limitations are appropriate. In such cases, the report required by subparagraph (a) in this section shall indicate the mass of pollutants regulated by pretreatment standards in the effluent of the user.
- (c) The reports required by this section shall contain the results of sampling and analysis of the discharge, including the flow and the nature and concentration or production and mass where requested by the city of pollutants contained therein which are limited by the applicable pretreatment standards. The frequency of monitoring shall be prescribed

in the wastewater discharge permit or the pretreatment standard. All analysis shall be performed in accordance with procedures established by the administrator pursuant to Section 304(g) of the Act and contained in 40 CFR, Part 136, and amendments thereto. Sampling shall be performed in accordance with techniques approved by the administrator.

- (5) <u>Maintenance of records</u>. Any industrial user subject to the reporting requirements established in this section shall maintain records of all information resulting from any monitoring activities required by this section. Such records shall include for all samples:
 - (a) The date, exact place, method, and time of sampling and the names of the persons taking the samples;
 - (b) The dates analyses were performed;
 - (c) Who performed the analyses;
 - (d) The analytical techniques/methods used; and
 - (e) The results of such analyses.

Any industrial user subject to the reporting requirement established in this section shall be required to retain for a minimum of three (3) years all records of monitoring activities and results (whether or not such monitoring activities are required by this section) and shall make such records available for inspection and copying by the city, Director of the Division of Water Quality Control, Tennessee Department of Health or the Environmental Protection Agency. This period of retention shall be extended during the course of any unresolved litigation regarding the industrial user or when requested by the city, the approval authority, or the Environmental Protection Agency.

- (6) <u>Safety</u>. While performing the necessary work on private properties, the mayor or duly authorized employees of the city shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the city employees and the city shall indemnify the company against loss or damage to its property by city employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the monitoring and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions. (1989 Code, § 8-307)
- 18-208. Enforcement and abatement. (1) Issuance of cease and desist orders. When the city finds that a discharge of wastewater has taken place in violation of prohibitions or limitations of this chapter, or the provisions of a wastewater discharge permit, the city shall issue an order to cease and desist, and direct that these persons not complying with such prohibitions, limits requirements, or provisions to:
 - (a) Comply immediately;
 - (b) Comply in accordance with a time schedule set forth by the city;

- (c) Take appropriate remedial or preventive action in the event of a threatened violation; or
- (d) Surrender the applicable user's permit if ordered to do so after a show cause hearing.

Failure of the city to issue a cease and desist order to a violating user shall not in any way relieve the user from any consequences of a wrongful or illegal discharge.

- (2) <u>Submission of time schedule</u>. When the city finds that a discharge of wastewater has been taking place in violation of prohibitions or limitations prescribed in this chapter, or wastewater source control requirements, effluent limitations of pretreatment standards, or the provisions of a wastewater discharge permit, the city shall require the user to submit for approval, with such modifications as it deems necessary, a detailed time schedule of specific actions which the user shall take in order to prevent or correct a violation of requirements. Such schedule shall be submitted to the city within 30 days of the issuance of the cease and desist order.
 - (3) Show cause hearing. (a) The city may order any user who causes or allows an unauthorized discharge to enter the POTW to show cause before the board of mayor and aldermen why the proposed enforcement action should not be taken. A notice shall be served on the user specifying the time and place of a hearing to be held by the board of mayor and aldermen regarding the violation, the reasons why the action is to be taken, the proposed enforcement action, and directing the user to show cause before the board of mayor and aldermen why the proposed enforcement action should not be taken. The notice of the hearing shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days before the hearing.
 - (b) The board of mayor and aldermen may itself conduct the hearing and take the evidence, or the board of mayor and aldermen may appoint a person to:
 - (i) Issue in the name of the board of mayor and aldermen notice of hearings requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in such hearings;
 - (ii) Take the evidence;
 - (iii) Transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the board of mayor and aldermen for action thereon.
 - (c) At any hearing held pursuant to this chapter, testimony taken must be under oath and recorded. The transcript, so recorded, will be made available to any member of the public or any party to the hearing upon payment of reproduction costs.

- (d) After the board of mayor and aldermen or the appointed persons have reviewed the evidence, it/they may issue an order to the user responsible for the discharge directing that, following a specified time period, the sewer service be discontinued unless adequate treatment facilities, devices or other related appurtenances shall have been installed on existing treatment facilities, and that these devices or other related appurtenances are properly operated. Further orders and directives as are necessary and appropriate may be issued.
- (4) <u>Legal action</u>. If any person discharges sewage, industrial wastes, or other wastes into the city's wastewater disposal system contrary to the provisions of this chapter, federal or state pretreatment requirements, or any order of the city, the city attorney may commence an action for appropriate legal and/or equitable relief in a court of competent jurisdiction.
- (5) Emergency termination of service. The city may suspend the wastewater treatment service and/or a wastewater contribution permit when such suspension is necessary, in the opinion of the city, in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health or welfare of persons, to the environment, causes interference to the POTW or causes the city to violate any condition of its NPDES permit.

Any person notified of a suspension of the wastewater treatment service and/or the wastewater contribution permit shall immediately stop or eliminate the contribution. In the event of a failure of the person to comply voluntarily with the suspension order, the city shall take such steps as deemed necessary including immediate severance of the sewer connection, to prevent or minimize damage to the POTW system or endangerment to any individuals. The city shall reinstate the wastewater contribution permit and/or the wastewater treatment service upon proof of the elimination of the non-complying discharge. A detailed written statement submitted by the user describing the causes of the harmful contribution and the measures taken to prevent any future occurrence shall be submitted to the city within 15 days of the date of occurrence.

- (6) <u>Public nuisance</u>. Discharges or wastewater in any manner in violation of this chapter or of any order issued by the board of mayor and aldermen as authorized by this chapter is hereby declared a public nuisance and shall be corrected or abated as directed by the board of mayor and aldermen. Any person creating a public nuisance shall be subject to the provisions of the city code or ordinances governing such nuisance.
- (7) <u>Correction of violation and collection of costs</u>. In order to enforce the provisions of this chapter, the city shall correct any violation hereof. The cost of such correction shall be added to any sewer service charge payable by the person violating this chapter or the owner or tenant of the property upon which the violation occurs, and the city shall have such remedies for the collection of such costs as it has for the collection of sewer service charges.

- (8) <u>Damage to facilities</u>. When a discharge of wastes causes an obstruction, damage, or any other physical or operational impairment to facilities, the city shall assess a charge against the user for the work required to clean or repair the facility and add such charge to the user's sewer service charge. (1989 Code, § 8-308)
- 18-209. <u>Fees and billing</u>. (1) <u>Purpose</u>. It is the purpose of this chapter to provide for the equitable recovery of costs from user's of the city's wastewater treatment system including costs of operation, maintenance, administration, bond service costs, capital improvements, depreciation, and equitable cost recovery of EPA administered federal wastewater grants.
- (2) <u>Types of charges and fees</u>. The charges and fees as established in the city's schedule of charges and fees may include but are not limited to:
 - (a) Inspection fee and tapping fee;
 - (b) Fees for applications for discharge;
 - (c) Sewer use charges;
 - (d) Surcharge fees;
 - (e) Industrial wastewater discharge permit fees;
 - (f) Fees for industrial discharge monitoring; and
 - (g) Other fees as the city may deem necessary.
- (3) <u>Fees for application for discharge</u>. A fee may be charged when a user or prospective user makes application for discharge as required by § 18-205 of this chapter.
- (4) <u>Inspection fee and tapping fee</u>. An inspection fee and tapping fee for a building sewer installation shall be paid to the city's sewer department at the time the application is filed.
- (5) <u>Sewer user charges</u>.¹ The board of mayor and aldermen shall establish monthly rates and charges for the use of the wastewater system and for the services supplied by the wastewater system.
- (6) <u>Industrial wastewater discharge permit fees</u>. A fee may be charged for the issuance of an industrial wastewater discharge fee in accordance with § 18-205 of this chapter.
- (7) Fees for industrial discharge monitoring. Fees may be collected from industrial user's having pretreatment or other discharge requirements to compensate the city for the necessary compliance monitoring and other administrative duties of the pretreatment program. (1989 Code, § 8-309)

¹Such rates are reflected in administrative ordinances or resolutions, which are of record in the office of the city recorder.

CHAPTER 3

CROSS CONNECTIONS, AUXILIARY INTAKES, ETC.¹

SECTION

- 18-301. Objectives.
- 18-302. Definitions.
- 18-303. Compliance with Tennessee Code Annotated.
- 18-304. Regulated.
- 18-305. Permit required.
- 18-306. New installations.
- 18-307. Existing installations.
- 18-308. Inspections.
- 18-309. Right of entry for inspections.
- 18-310. Correction of violations.
- 18-311. Required devices.
- 18-312. Non-potable supplies.
- 18-313. Statement required.
- 18-314. Penalty; discontinuance of water supply.
- 18-315. Provision applicable.

18-301. Objectives. The objectives of this chapter are:

- (1) To protect the public potable water system of City of Puryear Water System from the possibility of contamination or pollution by isolating within the customer's internal distribution system such contaminants or pollutants that could backflow or backsiphon into the public water system;
- (2) To promote the elimination or control of existing cross connections, actual or potential, between the customer's in-house potable water system and non-potable water systems, plumbing fixtures, and industrial piping systems;
- (3) To provide for the maintenance of a continuing program of cross connection control that will systematically and effectively prevent the contamination or pollution of all potable water systems. (1989 Code, § 8-401, as replaced by Ord. #64-11, Aug. 2011)
- **18-302.** <u>Definitions</u>. The following words, terms and phrases shall have the meanings ascribed to them in this section, when used in the interpretation and enforcement of this chapter:
- (1) "Air-gap" shall mean a vertical, physical separation between a water supply and the overflow rim of a non-pressurized receiving vessel. An

Water and sewer system administration: title 18.

Wastewater treatment: title 18.

¹Municipal code references

approved air-gap separation shall be at least twice the inside diameter of the water supply line, but in no case less than six inches (6"). Where a discharge line serves as receiver, the air-gap shall be at least twice the diameter of the discharge line, but not less than six inches (6").

- (2) "Atmospheric vacuum breaker" shall mean a device which prevents backsiphonage by creating an atmospheric vent when there is either a negative pressure or sub-atmospheric pressure in the water system.
- (3) "Auxiliary intake" shall mean any water supply, on or available to a premises, other than that directly supplied by the public water system. These auxiliary waters may include water from another purveyor's public water system; any natural source, such as a well, spring, river, stream, and so forth; used, reclaimed or recycled waters; or industrial fluids.
- (4) "Backflow" shall mean the undesirable reversal of the intended direction of flow in a potable water distribution system as a result of a cross connection.
- (5) "Backpressure" shall mean any elevation of pressure in the downstream piping system (caused by pump, elevated tank or piping, steam and/or air pressure) above the water supply pressure at the point which would cause, or tend to cause, a reversal of the normal direction of flow.
- (6) "Backsiphonage" shall mean the flow of water or other liquids, mixtures or substances into the potable water system from any source other than its intended source, caused by the reduction of pressure in the potable water system.
- (7) "Bypass" shall mean any system of piping or other arrangement whereby water from the public water system can be diverted around a backflow prevention device.
- (8) "Cross connection" shall mean any physical connection or potential connection whereby the public water system is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture or other waste or liquid of unknown or unsafe quality, which may be capable of imparting contamination to the public water system as a result of backflow or backsiphonage. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices, through which or because of which backflow could occur, are considered to be cross connections.
- (9) "Double check valve assembly" shall mean an assembly of two (2) independently operating, approved check valves with tightly closing resilient seated shut-off valves on each side of the check valves, fitted with properly located resilient seated test cocks for testing each check valve.
- (10) "Double check detector assembly" shall mean an assembly of two (2) independently operating, approved check valves with an approved water meter (protected by another double check valve assembly) connected across the check valves, with tightly closing resilient seated shut-off valves on each side of the check valves, fitted with properly located resilient seated test cocks for testing each part of the assembly.

(11) "Fire protection systems" shall be classified in six (6) different classes in accordance with <u>AWWA Manual M14 - Second Edition 1990</u>. The six (6) classes are as follows:

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

<u>Class 2</u> shall be the same as Class 1, except that booster pumps may be installed in the connections from the street mains.

<u>Class 3</u> shall be those with direct connection from public water supply mains, plus one (1) or more of the following: elevated storage tanks, fire pumps taking suction from above ground covered reservoirs or tanks, and/or pressure tanks (all storage facilities are filled from or connected to public water only, and the water in the tanks is to be maintained in a potable condition).

<u>Class 4</u> shall be those with direct connection from the public water supply mains, similar to Class 1 and Class 2, with an auxiliary water supply dedicated to fire department use and available to the premises, such as an auxiliary supply located within one thousand seven hundred feet (1,700') of the pumper connection.

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

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

- (12) "Interconnection" shall mean any system of piping or other arrangements whereby the public water supply is connected directly with a sewer, drain, conduit, pool, storage reservoir, or other device, which does or may contain sewage or other waste or liquid which would be capable of imparting contamination to the public water system.
- (13) "Manager" shall mean the Manager of the City of Puryear Water System or his duly authorized deputy, agent or representative.
- (14) "Person" shall mean any and all persons, natural or artificial, including any individual, firm or association, and any municipal or private corporation organized or existing under the laws of this or any other state or country.
- (15) "Potable water" shall mean water which meets the criteria of the Tennessee Department of Environment and Conservation and the United States Environmental Protection Agency for human consumption.
- (16) "Pressure vacuum breaker" shall mean an assembly consisting of a device containing one (1) or two (2) independently operating spring loaded

check valves and an independently operating spring loaded air inlet valve located on the discharge side of the check valve(s), with tightly closing shut-off valves on each side of the check valves and properly located test cocks for the testing of the check valves and relief valve.

- (17) "Public water supply" shall mean the City of Puryear Water System, which furnishes potable water to the public for general use and which is recognized as the public water supply by the Tennessee Department of Environment and Conservation.
- (18) "Reduced pressure principle backflow prevention device" shall mean an assembly consisting of two (2) independently operating approved check valves with an automatically operating differential relief valve located between the two (2) check valves, tightly closing resilient seated shut-off valves, plus properly located resilient seated test cocks for the testing of the check valves and the relief valve.
- (19) "Water system" shall be considered as made up of two (2) parts, the utility system and the customer system.
 - (a) The utility system shall consist of the facilities for the storage and distribution of water and shall include all those facilities of the water system under the complete control of the utility system, up to the point where the customer's system begins (i.e. the water meter);
 - (b) The customer system shall include those parts of the facilities beyond the termination of the utility system distribution system that are utilized in conveying domestic water to points of use. (1989 Code, § 8-402, as replaced by Ord. #64-11, Aug. 2011)
- 18-303. Compliance with Tennessee Code Annotated. The City of Puryear Water System shall be responsible for the protection of the public water system from contamination or pollution due to the backflow of contaminants through the water service connection. The City of Puryear Water System shall comply with Tennessee Code Annotated, § 68-221-711 as well as the Rules and Regulations for Public Water Systems and Drinking Water Quality, legally adopted in accordance with this code, which pertain to cross connections, auxiliary intakes, bypasses and interconnections; and shall establish an effective, on-going program to control these undesirable water uses. (1989 Code, § 8-403, as replaced by Ord. #64-11, Aug. 2011)
- 18-304. Regulated. (1) No water service connection to any premises shall be installed or maintained by the City of Puryear Water System unless the water supply system is protected as required by state laws and this chapter. Service of water to any premises shall be discontinued by the City of Puryear Water System if a backflow prevention device required by this chapter is not installed, tested, and/or maintained; or if it is found that a backflow prevention device has been removed, bypassed, or if an unprotected cross connection exists

on the premises. Service shall not be restored until such conditions or defects are corrected.

- (2) It shall be unlawful for any person to cause a cross connection to be made or allow one to exist for any purpose whatsoever unless the construction and operation of same have been approved by the Tennessee Department of Environment and Conservation, and the operation of such cross connection is at all times under the direction of the manager of the City of Puryear Water System.
- (3) If, in the judgment of the manager or his designated agent, an approved backflow prevention device is required at the water service connection to a customer's premises, or at any point(s) within the premises, to protect the potable water supply, the manager shall compel the installation, testing and maintenance of the required backflow prevention device(s) at the customer's expense.
- (4) An approved backflow prevention device shall be installed on each water service line to a customer's premises at or near the property line or immediately inside the building being served; but in all cases, before the first branch line leading off the service line.
- (5) For new installations, the manager or his designated agent shall inspect the site and/or review plans in order to assess the degree of hazard and to determine the type of backflow prevention device, if any, that will be required, and to notify the owners in writing of the required device and installation criteria. All required devices shall be installed and operational prior to the initiation of water service.
- (6) For existing premises, personnel from the City of Puryear Water System shall conduct inspections and evaluations, and shall require correction of violations in accordance with the provisions of this chapter. (1989 Code, § 8-404, as replaced by Ord. #64-11, Aug. 2011)
- **18-305.** <u>Permit required</u>. (1989 Code, § 8-405, as replaced by Ord. #64-11, Aug. 2011)
- 18-306. <u>New installations</u>. No installation, alteration, or change shall be made to any backflow prevention device connected to the public water supply for water service, fire protection or any other purpose without first contacting the City of Puryear Water System for approval. (1989 Code, § 8-406, as replaced by Ord. #64-11, Aug. 2011)
- 18-307. Existing installations. No alteration, repair, testing or change shall be made of any existing backflow prevention device connected to the public water supply for water service, fire protection or any other purpose without first securing the appropriate approval from the City of Puryear Water System. (1989 Code, § 8-407, as replaced by Ord. #64-11, Aug. 2011)

- 18-308. <u>Inspections</u>. The manager or his designated agent shall inspect all properties served by the public water supply where cross connections with the public water supply are deemed possible. The frequency of inspections and re-inspection shall be based on potential health hazards involved, and shall be established by the City of Puryear Water System in accordance with guidelines acceptable to the Tennessee Department of Environment and Conservation. (1989 Code, § 8-408, as replaced by Ord. #64-11, Aug. 2011)
- 18-309. Right of entry for inspections. The manager or his authorized representative shall have the right to enter, at any reasonable time, any property served by a connection to the City of Puryear Water System public water system for the purpose of inspecting the piping system therein for cross connection, auxiliary intakes, bypasses or interconnections, or for the testing of backflow prevention devices. Upon request, the owner, lessee, or occupant of any property so served shall furnish any pertinent information regarding the piping system(s) on such property. The refusal of such information or refusal of access, when requested, shall be deemed evidence of the presence of cross connections, and shall be grounds for disconnection of water service. (1989 Code, § 8-409, as replaced by Ord. #64-11, Aug. 2011)
- 18-310. <u>Correction of violations</u>. (1) Any person found to have 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 the provisions of this chapter. After a thorough investigation of the existing conditions and an appraisal of the time required to complete the work, the manager or his representative shall assign an appropriate amount of time, but in no case shall the time for corrective measures exceed ninety (90) days.
- (2) Where cross connections, auxiliary intakes, bypasses or interconnections are found that constitute an extreme hazard with the immediate possibility of contaminating the public water system, the City of Puryear Water System shall require that immediate corrective action be taken to eliminate the threat to the public water system. Expeditious steps shall be taken to disconnect the public water system from the on-site piping system unless the imminent hazard is immediately corrected, subject to the right to a due process hearing upon timely request. The time allowed for preparation for a due process hearing shall be relative to the risk of hazard to the public health and may follow disconnection when the risk to the public health and safety, in the opinion of the manager, warrants disconnection prior to a due process hearing.
- (3) The failure to correct conditions threatening the safety of the public water system as prohibited by this chapter and <u>Tennessee Code Annotated</u>, § 68-221-711, within the time limits established by the manager or his representative, shall be grounds for denial of water service. If proper protection has not been provided after a reasonable time, the manager shall give the

customer legal notification that water service is to be discontinued, and shall physically separate the public water system from the customer's on-site piping in such a manner that the two (2) systems cannot again be connected by an unauthorized person, subject to the right of a due process hearing upon timely request. The due process hearing may follow disconnection when the risk to the public health and safety, in the opinion of the manager, warrants disconnection prior to a due process hearing. (1989 Code, § 8-410, as replaced by Ord. #64-11, Aug. 2011)

- **18-311.** Required devices. (1) An approved backflow prevention assembly shall be installed downstream of the meter on each service line to a customer's premises at or near the property line or immediately inside the building being served, but in all cases, before the first branch line leading off the service line, when any of the following conditions exist:
 - (a) Impractical to provide an effective air-gap separation;
 - (b) The owner/occupant of the premises cannot or is not willing to demonstrate to the City of Puryear Water System that the water use and protective features of the plumbing are such as to pose no threat to the safety or potability of the water;
 - (c) The nature and mode of operation within a premise are such that frequent alterations are made to the plumbing;
 - (d) There is likelihood that protective measures may be subverted, altered or disconnected;
 - (e) The nature of the premises is such that the use of the structure may change to a use wherein backflow prevention is required;
 - (f) The plumbing from a private well or other water source enters the premises served by the public water system.
- (2) The protective devices shall be of the reduced pressure zone type (except in the case of certain fire protection systems and swimming pools with no permanent plumbing installed) approved by the Tennessee Department of Environment and Conservation and the City of Puryear Water System, as to manufacture, model, size and application. The method of installation of backflow prevention devices shall be approved by the City of Puryear Water System prior to installation and shall comply with the criteria set forth in this chapter. The installation and maintenance of backflow prevention devices shall be at the expense of the owner or occupant of the premises.
- (3) Premises requiring reduced pressure principle assemblies or air gap separation. High risk high hazards. Establishments which pose significant risk of contamination or may create conditions which pose an extreme hazard of immediate concern (high risk high hazards), the cross connection control inspector shall require immediate or a short amount of time (fourteen (14) days maximum), depending on conditions, for corrective action to be taken. In such cases, if corrections have not been made within the time limits set forth, water service will be discontinued.

High risk high hazards require a reduced pressure principle (or detector) assembly. The following list is establishments deemed high risk high hazard and require a reduced pressure principle assembly:

- (a) High risk high hazards:
 - (i) Mortuaries, morgues, autopsy facilities;
- (ii) Hospitals, medical buildings, animal hospitals and control centers, doctor and dental offices;
- (iii) Sewage treatment facilities, water treatment, sewage and water treatment pump stations;
- (iv) Premises with auxiliary water supplies or industrial piping systems;
- (v) Chemical plants (manufacturing, processing, compounding, or treatment);
- (vi) Laboratories (industrial, commercial, medical research, school);
 - (vii) Packing and rendering houses;
 - (viii) Manufacturing plants;
 - (ix) Food and beverage processing plants;
 - (x) Automated car wash facilities;
 - (xi) Extermination companies;
 - (xii) Airports, railroads, bus terminals, piers, boat docks;
- (xiii) Bulk distributors and users of pesticides, herbicides, liquid fertilizer, etc.;
 - (xiv) Metal plating, pickling, and anodizing operations;
 - (xv) Greenhouses and nurseries;
 - (xvi) Commercial laundries and dry cleaners;
 - (xvii) Film laboratories;
 - (xviii) Petroleum processes and storage plants;
 - (xix) Restricted establishments;
 - (xx) Schools and educational facilities;
 - (xxi) Animal feedlots, chicken houses, and CAFOs;
 - (xxii) Taxidermy facilities;
- (xxiii) Establishments which handle, process, or have extremely toxic or large amounts of toxic chemicals or use water of unknown or unsafe quality extensively.
- (b) High hazard. In cases where there is less risk of contamination, or less likelihood of cross connections contaminating the system, a time period of ninety (90) days maximum will be allowed for corrections. High hazard is a cross connection or potential cross connection involving any substance that could, if introduced in the public water supply, cause death, illness, and spread disease. (See Appendix A of manual)
- (4) Applications requiring backflow prevention devices shall include, but shall not be limited to, domestic water service and/or fire flow connections

for all medical facilities, all fountains, lawn irrigation systems, wells, water softeners and other treatment systems, swimming pools and on all fire hydrant connections other than those by the fire department in combating fires. Those facilities deemed by City of Puryear Water System as needing protection:

- (a) Class 1, Class 2 and Class 3 fire protection systems shall generally require a double check valve assembly except:
 - (i) A double check detector assembly shall be required where a hydrant or other point of use exists on the system; or
 - (ii) A reduced pressure backflow prevention device shall be required where:
 - (A) Underground fire sprinkler lines are parallel to and within ten feet (10') horizontally of pipes carrying sewage or significantly toxic materials;
 - (B) Premises have unusually complex piping systems;
 - (C) Pumpers connecting to the system have corrosion inhibitors or other chemicals added to the tanks of the fire trucks.
- (b) Class 4, Class 5 and Class 6 fire protection systems shall require reduced pressure backflow prevention devices.
- (c) Wherever the fire protection system piping is not an acceptable potable water system material, or chemicals such as foam concentrates or antifreeze additives are used, a reduced pressure backflow prevention device shall be required.
- (d) Swimming pools with no permanent plumbing and only filled with hoses will require a hose bibb vacuum breaker be installed on the faucet used for filling.
- (5) The manager or his representative may require additional and/or internal backflow prevention devices wherein it is deemed necessary to protect potable water supplies within the premises.
- (6) <u>Installation criteria</u>. The minimum acceptable criteria for the installation of reduced pressure backflow prevention devices, double check valve assemblies or other backflow prevention devices requiring regular inspection or testing shall include the following:
 - (a) All required devices shall be installed in accordance with the provisions of this chapter by a person approved by the City of Puryear Water System who is knowledgeable in the proper installation. Only licensed sprinkler contractors may install, repair or test backflow prevention devices on fire protection systems.
 - (b) All devices shall be installed in accordance with the manufacturer's instructions and shall possess appropriate test cocks, fittings and caps required for the testing of the device (except hose bibb vacuum breakers). All fittings shall be of brass construction, unless

otherwise approved by the City of Puryear Water System, and shall permit direct connection to department test equipment.

- (c) The entire device, including valves and test cocks, shall be easily accessible for testing and repair.
- (d) All devices shall be placed in the upright position in a horizontal run of pipe.
- (e) Device shall be protected from freezing, vandalism, mechanical abuse and from any corrosive, sticky, greasy, abrasive or other damaging environment.
- (f) Reduced pressure backflow prevention devices shall be located a minimum of twelve inches (12") plus the nominal diameter of the device above either:
 - (i) The floor:
 - (ii) The top of opening(s) in the enclosure; or
 - (iii) Maximum flood level, whichever is higher. Maximum height above the floor surface shall not exceed sixty inches (60").
- (g) Clearance from wall surfaces or other obstructions shall be at least six inches (6"). Devices located in non-removable enclosures shalt have at least twenty-four inches (24") of clearance on each side of the device for testing and repairs.
- (h) Devices shall be positioned where a discharge from the relief port will not create undesirable conditions. The relief port must never be plugged, restricted or solidly piped to a drain.
- (i) An approved air-gap shall separate the relief port from any drainage system. An approved air-gap shall be at least twice the inside diameter of the supply line, but never less than one inch (1").
- (j) An approved strainer shall be installed immediately upstream of the backflow prevention device, except in the case of a fire protection system.
- (k) Devices shall be located in an area free from submergence or flood potential, therefore never in a below grade pit or vault. All devices shall be adequately supported to prevent sagging.
- (l) Adequate drainage shall be provided for all devices. Reduced pressure backflow prevention devices shall be drained to the outside whenever possible.
- (m) Fire hydrant drains shall not be connected to the sewer, nor shall fire hydrants be installed such that backflow/backsiphonage through the drain may occur.
- (n) Enclosures for outside installations shall meet the following criteria:
 - (i) All enclosures for backflow prevention devices shall be as manufactured by a reputable company or an approved equal.
 - (ii) For backflow prevention devices up to and including two inches (2"), the enclosure shall be constructed of adequate

material to protect the device from vandalism and freezing and shall be approved by the City of Puryear Water System. The complete assembly, including valve stems and hand wheels, shall be protected by being inside the enclosure.

- (iii) To provide access for backflow prevention devices up to and including two inches (2"), the enclosure shall be completely removable. Access for backflow prevention devices two and one-half inches (2 1/2") and larger shall be provided through a minimum of two (2) access panels. The access panels shall be of the same height as the enclosure and shall be completely removable. All access panels shall be provided with built-in locks.
- (iv) The enclosure shall be mounted to a concrete pad in no case less than four inches (4") thick. The enclosure shall be constructed, assembled and/or mounted in such a manner that it will remain locked and secured to the pad even if any outside fasteners are removed. All hardware and fasteners shall be constructed of 300 series stainless steel.
- (v) Heating equipment, if required, shall be designed and furnished by the manufacturer of the enclosure to maintain an interior temperature of forty degrees Fahrenheit (+40 $^{\circ}$ F) with an outside temperature of negative thirty degrees Fahrenheit (-30 $^{\circ}$ F) and a wind velocity of fifteen (15) miles per hour.
- (o) Where the use of water is critical to the continuance of normal operations or the protection of life, property or equipment, duplicate backflow prevention devices shall be provided to avoid the necessity of discontinuing water service to test or repair the protective device. Where it is found that only one (1) device has been installed and the continuance of service is critical, the City of Puryear Water System shall notify, in writing, the occupant of the premises of plans to interrupt water services and arrange for a mutually acceptable time to test the device. In such cases, the City of Puryear Water System may require the installation of a duplicate device.
- (p) The City of Puryear Water System shall require the occupant of the premises to keep any backflow prevention devices working properly and to make all indicated repairs promptly. Repairs shall be made by qualified personnel acceptable to the City of Puryear Water System. Expense of such repairs shall be borne by the owner or occupant of the premises. The failure to maintain a backflow prevention device in proper working condition shall be grounds for discontinuance of water service to a premises. Likewise the removal, bypassing or alteration of a backflow prevention device or the installation thereof so as to render a device ineffective shall constitute a violation of this chapter and shall be grounds for discontinuance of water service. Water service to such premises shall not be restored until the customer has corrected or

- eliminated such conditions or defects to the satisfaction of the City of Puryear Water System.
- (7) Testing of devices. Each customer that owns a device is responsible to have the device tested annually. The customer is responsible for the expense of testing. Devices shall be tested at least annually by a qualified person possessing a valid certification from the Tennessee Department of Environment and Conservation, Division of Water Supply for the testing of such devices. A record of this test will be provided to the City of Puryear Water System and kept on file with the City of Puryear Water System. (as added by Ord. #64-11, Aug. 2011)
- 18-312. <u>Non-potable supplies</u>. The potable water supply made available to a premises served by the public water system shall be protected from contamination as specified in the provisions of this chapter. Any water pipe or outlet which could be used for potable or domestic purposes and which is not supplied by the potable water system must be labeled in a conspicuous manner such as:

WATER UNSAFE FOR DRINKING

The minimum acceptable sign shall have black letters at least one inch (1") high located on a red background. Color-coding of pipelines, in accordance with Occupational Safety and Health Act (OSHA) guidelines, shall be required in locations where in the judgment of the City of Puryear Water System, such coding is necessary to identify and protect the potable water supply. (as added by Ord. #64-11, Aug. 2011)

- 18-313. Statement required. Any person whose premises are supplied with water from the public water system, and who also has on the same premises a well or other separate source of water supply, or who stores water in an uncovered or unsanitary storage reservoir from which the water is circulated through a piping system, shall file with the City of Puryear Water System a statement of the nonexistence of unapproved or unauthorized cross connections, auxiliary intakes, bypasses or interconnections. Such statement shall contain an agreement that no cross connections, auxiliary intakes, bypasses or interconnections will be permitted upon the premises. Such statement shall also include the location of all additional water sources utilized on the premises and how they are used. Maximum backflow protection shall be required on all public water sources supplied to the premises. (as added by Ord. #64-11, Aug. 2011)
- 18-314. Penalty; discontinuance of water supply. (1) Any person who neglects or refuses to comply with any of the provisions of this chapter may be deemed guilty of a misdemeanor and subject to a fine.

- (2) Independent of and in addition to any fines or penalties imposed, the manager may discontinue the public water supply service to any premises upon which there is found to be a cross connection, auxiliary intake, bypass or interconnection; and service shall not be restored until such cross connection, auxiliary intake, bypass or interconnection has been eliminated. (as added by Ord. #64-11, Aug. 2011)
- 18-315. <u>Provision applicable</u>. The requirements contained in this chapter shall apply to all premises served by the City of Puryear Water System and are hereby made part of the conditions required to be met for the City of Puryear Water System to provide water services to any premises. The provisions of this chapter shall be rigidly enforced since it is essential for the protection of the public water distribution system against the entrance of contamination. Any person aggrieved by the action of this chapter is entitled to a due process hearing upon timely request. (as added by Ord. #64-11, Aug. 2011)

CHAPTER 4

USER CHARGE SYSTEM

SECTION

- 18-401. Introduction.
- 18-402. Proposed user charge system.
- 18-403. User charge rate structure.
- 18-404. Surcharge for high strength wastes.
- 18-405. Summary.

18-401. <u>Introduction</u>. The City of Puryear, Tennessee, has undertaken the task of upgrading their sewage treatment facilities to provide adequate service for the city and to meet water quality requirements as outlined by PL92-500. The project was financed by two grants, one from the State of Tennessee and the other from the Tennessee Department of Economic and Community Development. The remainder of the cost will be paid by the city.

The cost of labor, chemicals, plant maintenance and equipment replacement shall be borne by the city. This money must be raised through a user charge system which distributes the cost of operation, maintenance and replacement among all the users in proportion to their waste loads.

The user charge system should be structured to insure that the following criteria are met:

- (1) Costs should be fairly proportioned among all users according to waste load and flow characteristics:
- (2) The system should produce enough annual revenue to offset all annual costs:
- (3) The system should comply with all local, state and federal laws, and be accepted by all local, state and federal authorities.

The following user charge system should adequately meet all of these requirements. (Ord. #9-89, Sept. 1989)

18-402. <u>Proposed user charge system</u>. Users of the Puryear wastewater collection and treatment system presently discharge only domestic waste. However, provisions should be made in the user charge system for the possibility of future industrial and/or commercial waste of higher strength. Accordingly, the user charge system will be based on a fee for average daily flows with a surcharge for wastes with a strength greater than domestic. This system is described in Appendix B of 40 CFR Part 35 and is presented hereinafter.

(1) Class I - Generally describes residential users.

$$Cu = \frac{Ct}{Vt}(Vu) \qquad \qquad Cd = \frac{Cdt}{N}$$

Total charge = Cu + Cd

(2) Class II - Generally describes industrial users.

$$C_S = [B_C(B) + S_C(S) + P_C(P)] V_U$$

Cd = Charge to user for recovery of debt service.

Cdt = Total debt service charge per year.

Cu = Charge to user per unit time.

Ct = Total O & M costs per unit time.

Vt = Total volume of waste per unit time.

Vu = Volume contributed by a user per unit time.

N = Total number of sewer customers.

Cs = Surcharge for excessive strength wastewater.

Bc = O & M cost for treatment of a unit of BOD.

Sc = O & M cost for treatment of a unit of SS.

Pc = O & M cost for treatment of a unit of any pollutant.

B = Concentration of BOD from a user above a base level.

S = Concentration of SS from a user above a base level.

P = Concentration of any pollutant from a user above a base level.

Users discharging only sanitary waste will be charged in accordance with the Class I model while those discharging higher strength wastes will be charged in accordance with the Class I model plus the Class II model as a surcharge.

Values for pollutants discharged by individual users will be determined by the manner described in the Puryear Sewer Use Ordinance. (See Chapter 2 of this title.)

Operation, maintenance, and depreciation costs are estimated for the first year of operation in order to determine the initial user charge. The user charge system will undergo a biennial review to reflect actual O & M costs associated with wastewater treatment.

Operational expenses for the sewer system will be published with the users' bill on an annual basis in order to inform the users of how collected fees are allocated.

Operation, maintenance, depreciation, and debt service costs are shown on Table 1. Water usage is shown in Table 2. This data is used to calculate average annual usage and the associated costs of the user charge system.

TABLE 1

Operation, Maintenance, Depreciation and Debt Retirement Cost

(1) Operation, Maintenance, and Depreciation cost

Labor	12,000
Utilities	3,200
Materials	1,500
Administration	2,750
Outside Services	1,500
Depreciation	15,600
Miscellaneous Expenses	1,000

\$37,550/year

(2) <u>Debt Service Retirement</u> \$ 7,500/year

\$ 7,500

TOTAL ANNUAL COST TO BE RECOVERED \$ 45,050

TABLE 2

Water Use in Puryear, Tennessee Sewered Customers

Average No. of	Total Gallons
Customers Per Month	Sold Per Year
286	16,033,400

(Ord. #9-89, Sept. 1989)

18-403. User charge rate structure.

(1)	Debt service retirement	\$ 7,500/year
(2)	Debt service retirement	
	(\$7,500 divided by 286 divided by 12)	\$ 2.19/cust/month

(3) Depreciation operation and maintenance cost \$37,550/yr

(4) Gallons per year treated 16,033,400 gallons

(5) Cost per 100 gallons treated per year (\$/1000 gallons) \$2.34/1000 gallons

(Ord. #9-89, Sept. 1989)

18-404. <u>Surcharge for high strength wastes</u>. At such time that a user discharges a higher strength waste than average sewage and equitable surcharge will be levied based upon costs of chemicals, time and maintenance required to treat the extra component of waste. (Ord. #9-89, Sept. 1989)

18-405. <u>Summary</u>. A summary of the proposed rate structure developed in § 18-403 is presented in Table 3.

 $\frac{\text{TABLE 3}}{\text{User Charge Monthly Bill - Inside City Limits}}$

<u>Usage</u>	Debt Service Cost per month per customer	Depreciation O & M Cost per month per customer	Total Cost per customer per month
First 2,000 gals.	\$2.19	\$4.68	\$6.87 Min. Bill
All over 2,000	- 0 -	\$2.34/1,000 gals.	\$2.34/1,000 gals.

User Charge Monthly Bill - Outside City Limits

<u>Usage</u>	Debt Service Cost per month per customer	Depreciation O & M Cost per month per customer	Total Cost per customer per month
First 2,000 gals.	\$3.29	\$7.02	\$10.31 Min. Bill
All over 2,000	- 0 -	\$3.51/1,000 gals.	\$3.51/1,000 gals.

(Ord. #9-89, Sept. 1989)