TITLE 18

WATER AND SEWERS¹

CHAPTER

- 1. SEWAGE AND HUMAN EXCRETA DISPOSAL.
- 2. GENERAL WASTEWATER REGULATIONS.

CHAPTER 1

SEWAGE AND HUMAN EXCRETA DISPOSAL²

SECTION

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- 18-114. Carnivals, circuses, etc.
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- **18-101.** <u>**Definitions**</u>. The following definitions shall apply in the interpretation of this chapter:
- (1) "Accessible sewer." A public sanitary sewer located in a street or alley abutting on the property in question or otherwise within two hundred feet (200') of any boundary of said property measured along the shortest available right-of-way.

Building, utility and residential codes: title 12

Refuse disposal: title 17

²Municipal code reference

Plumbing code: title 12, chapter 2.

¹Municipal code references

- (2)"Approved septic tank system." A watertight covered receptacle of monolithic concrete, either precast or cast in place, constructed according to plans approved by the health officer. Such tanks shall have a capacity of not less than seven hundred fifty (750) gallons and in the case of homes with more than two (2) bedrooms the capacity of the tank shall be in accordance with the recommendations of the Tennessee Department of Health and Environment as provided for in its 1967 bulletin entitled "Recommended Guide for Location, Design, and Construction of Septic Tanks and Disposal Fields." A minimum liquid depth of four feet (4') should be provided with a minimum depth of air space above the liquid of one foot (1'). The septic tank dimensions should be such that the length from inlet to outlet is at least twice but not more than three (3) times the width. The liquid depth should not exceed five feet (5'). The discharge from the septic tank shall be disposed of in such a manner that it may not create a nuisance on the surface of the ground or pollute the underground water supply, and such disposal shall be in accordance with recommendations of the health officer as determined by acceptable soil percolation data.
- (3) "Health officer." The person duly appointed to such position having jurisdiction, or any person or persons authorized to act as his agent.
- (4) "Human excreta." The bowel and kidney discharges of human beings.
- (5) "Other approved method of sewage disposal." Any privy, chemical toilet, or other toilet device (other than a sanitary sewer, septic tank, or sanitary pit privy as described above) the type, location, and construction of which have been approved by the health officer.
- (6) "Sanitary pit privy." A privy having a fly-tight floor and seat over an excavation in earth, located and constructed in such a manner that flies and animals will be excluded, surface water may not enter the pit, and danger of pollution of the surface of the ground or the underground water supply will be prevented.
- (7) "Sewage." All water-carried human and household wastes from residences, buildings, or industrial establishments.
- (8) "Watercourse." Any natural or artificial drain which conveys water either continuously or intermittently. (1995 Code, § 18-101)
- 18-102. <u>Places required to have sanitary disposal methods</u>. Every residence, building, or place where human beings reside, assemble, or are employed within the corporate limits shall be required to have a sanitary method for disposal of sewage and human excreta. (1995 Code, § 18-102)
- 18-103. When a connection to the public sewer is required. Wherever an accessible sewer exists and water under pressure is available, approved plumbing facilities shall be provided and the wastes from such facilities shall be discharged through a connection to said sewer made in compliance with the requirements of the official responsible for the public

sewerage system. On any lot or premise accessible to the sewer no other method of sewage disposal shall be employed. (1995 Code, § 18-103)

18-104. When a septic tank shall be used. Wherever water carried sewage facilities are installed and their use is permitted by the health officer, and an accessible sewer does not exist, the wastes from such facilities shall be discharged into an approved septic tank system.

No septic tank or other water-carried sewage disposal system except a connection to a public sewer shall be installed without the approval of the health officer or his duly appointed representative. The design, layout, and construction of such systems shall be in accordance with specifications approved by the health officer and the installation shall be under the general supervision of the department of health and environment. (1995 Code, § 18-104)

- 18-105. Registration and records of septic tank cleaners, etc. Every person, firm, or corporation who operates equipment for the purpose of removing digested sludge from septic tanks, cesspools, privies, and other sewage disposal installations on private or public property must register with the health officer and furnish such records of work done within the corporate limits as may be deemed necessary by the health officer. (1995 Code, § 18-105)
- 18-106. <u>Use of pit privy or other method of disposal</u>. Wherever a sanitary method of human excreta disposal is required under § 18-102 and water-carried sewage facilities are not used, a sanitary pit privy or other approved method of disposal shall be provided. (1995 Code, § 18-106)
- 18-107. Approval and permit required for septic tanks, privies, etc. Any person, firm, or corporation proposing to construct a septic tank system, privy, or other sewage disposal facility, requiring the approval of the health officer under this chapter, shall before the initiation of construction obtain the approval of the health officer for the design and location of the system and secure a permit from the health officer for such system. (1995 Code, § 18-107)
- **18-108.** Owner to provide disposal facilities. It shall be the duty of the owner of any property upon which facilities for sanitary sewage or human excreta disposal are required by § 18-102, or the agent of the owner to provide such facilities. (1995 Code, § 18-108)
- **18-109.** Occupant to maintain disposal facilities. It shall be the duty of the occupant, tenant, lessee, or other person in charge to maintain the facilities for sewage disposal in a clean and sanitary condition at all times, and no refuse or other material which may unduly fill up, clog, or otherwise interfere

with the operation of such facilities shall be deposited therein. (1995 Code, § 18-109)

- 18-110. Only specified methods of disposal to be used. No sewage or human excreta shall be thrown out, deposited, buried, or otherwise disposed of, except by a sanitary method of disposal as specified in this chapter. (1995 Code, § 18-110)
- **18-111.** <u>Discharge into watercourses restricted</u>. No sewage or excreta shall be discharged or deposited into any lake or watercourse except under conditions specified by the health officer and specifically authorized by the Tennessee Stream Pollution Control Board. (1995 Code, § 18-111)
- 18-112. <u>Pollution of ground water prohibited</u>. No sewage effluent from a septic tank, sewage treatment plant, or discharges from any plumbing facility shall empty into any well, either abandoned or constructed for this purpose, cistern, sinkhole, crevice, ditch, or other opening, either natural or artificial, in any formation which may permit the pollution of ground water. (1995 Code, § 18-112)
- 18-113. Enforcement of chapter. It shall be the duty of the health officer to make an inspection of the methods of disposal of sewage and human excreta as often as is considered necessary to insure full compliance with the terms of this chapter. Written notification of any violation shall be given by the health officer to the person or persons responsible for the correction of the condition, and correction shall be made within forty-five (45) days after notification. If the health officer shall advise any person that the method by which human excreta and sewage is being disposed of constitutes an immediate and serious menace to health, such person shall at once take steps to remove the menace. Failure to remove such menace immediately shall be punishable under the general penalty clause for this code. However, such person shall be allowed the number of days herein provided within which to make permanent correction. (1995 Code, § 18-113)
- 18-114. <u>Carnivals, circuses, etc.</u> Whenever carnivals, circuses, or other transient groups of persons come within the corporate limits, such groups of transients shall provide a sanitary method for disposal of sewage and human excreta. Failure of a carnival, circus, or other transient group to provide such sanitary method of disposal and to make all reasonable changes and corrections proposed by the health officer shall constitute a violation of this section. In these cases the violator shall not be entitled to the notice of forty-five (45) days provided for in the preceding section. (1995 Code, § 18-114)
- **18-115.** <u>Violations</u>. Any person, persons, firm, association, or corporation or agent thereof, who shall fail, neglect, or refuse to comply with the

provisions of this chapter shall be deemed guilty of a misdemeanor and shall be punishable under the general penalty clause for this code. $(1995 \text{ Code}, \S 18-115)$

CHAPTER 2

GENERAL WASTEWATER REGULATIONS¹

SECTION

- 18-201. Purpose and policy.
- 18-202. Administrative.
- 18-203. Definitions.
- 18-204. Abbreviations.
- 18-205. Proper waste disposal required.
- 18-206. Private domestic wastewater disposal.
- 18-207. Connection to public sewers.
- 18-208. Septic tank effluent pump.
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- 18-212. Enforcement and abatement.
- 18-213. City's rights of revision.
- 18-214. Fees and billing.
- 18-215. Validity.
- 18-201. <u>Purpose and policy</u>. This chapter sets forth uniform requirements for users of the City of Tusculum, Tennessee, wastewater treatment system and enables the City to comply with the Federal Clean Water Act and the state Water Quality Control Act and rules adopted pursuant to these acts. The objectives of this chapter are:
 - (1) To protect public health;
- (2) To protect wastewater system treatment and collection personnel who may be affected by wastewater and sludge in the course of their employment and the general public;
- (3) To control discharges and prevent pollutants from entering into the public sewage collection system that may interfere with wastewater treatment and collection systems;
- (4) To define the criteria for design, construction, ownership, maintenance, and operation of residential and commercial sewer connections; and
- (5) To provide for fees for the equitable distribution of the cost of operation, maintenance, and improvement of the system.

¹Appendix B contains: grease trap sizing formula, STEP system application form, FOG application and implementation plan and the enforcement response plan.

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

Nothing herein shall, however, require certain buildings existing on April 1, 2014, located on properties along and adjacent to East Andrew Johnson Highway within the city limits of Tusculum, Tennessee, whether residential or commercial, to connect to the initial wastewater collection system unless such property has been cited by TDEC for a failing private disposal system. All buildings constructed on said properties after April 1, 2014, will be required to connect to the system according to the conditions set forth herein.

This chapter shall apply to all users inside or outside the city who are, by implied contract or written agreement with the city, dischargers of applicable wastewater to the city's wastewater collection system. (Ord. #14-01, June 2014)

- **18-202.** <u>Administrative</u>. Except as otherwise provided herein, the local administrative officer of the city shall administer, implement, and enforce the provisions of this chapter. (Ord. #14-01, June 2014)
- **18-203.** <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) "Administrator." The administrator of the United States Environmental Protection Agency.
- (2) "Act" or "the Act." The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended and found in 33 U.S.C. § 1251, et seq.
- (3) "Approval authority." the Tennessee Department of Environment and Conservation, Division of Water Resources.
 - (4) "Authorized or duly authorized representative of industrial user:
 - (a) If the user is a corporation:
 - (i) The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any person who performs similar policy or decision-making functions for the corporation; or
 - (ii) The manager of one (1) or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can insure that the necessary systems are established or actions taken to gather complete and

accurate information for individual wastewater discharge permit requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (b) If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively.
- (c) If the user is a federal, state, or local governmental agency: a director or highest official appointed or designated to oversee the operation and performance of the activities of the governmental facility, or their designee.
- (d) The individual described in subsections (a) through (c), above, may designate a duly authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the city.
- (5) "Biochemical Oxygen Demand (BOD)." The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure for five (5) days at twenty degrees Centigrade (20° C) expressed in terms of weight and concentration (milligrams per liter (mg/l)).
- (6) "Building sewer." A sewer conveying wastewater from the premises of a user to the publicly owned sewer collection system.
- (7) "City." The Board of Mayor and Commissioners, City of Tusculum, Tennessee.
- (8) "Commissioner." The commissioner of environment and conservation or the commissioner's duly authorized representative and, in the event of the commissioner's absence or a vacancy in the office of commissioner, the deputy commissioner.
- (9) "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 State Operating Permit (SOP) for its wastewater treatment works where sewer works have been designed and used to reduce or remove such pollutants.
- (10) "Composite sample." A sample composed of two (2) or more discrete samples. The aggregate sample will reflect the average water quality covering the compositing or sample period.
- (11) "Control authority." The term "control authority" shall refer to the "approval authority," defined herein above; or the local hearing authority if the city has an approved pretreatment program under the provisions of 40 CFR 403.11.
- (12) "Cooling water." The water discharge from any use such as air conditioning, cooling, or refrigeration, or to which the only pollutant added is heat.

- (13) "Customer." Any individual, partnership, corporation, association, or group who receives sewer service from the city under either an express or implied contract requiring payment to the city for such service.
- (14) "Daily maximum." The arithmetic average of all effluent samples for a pollutant (except pH) collected during a calendar day. The daily maximum for pH is the highest value tested during a twenty-four (24) hour calendar day.
- (15) "Daily maximum limit." The maximum allowable discharge limit of a pollutant during a calendar day. Where daily maximum limits are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limits are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.
- (16) "Direct discharge." The discharge of treated or untreated wastewater directly to the waters of the State of Tennessee.
- (17) "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.
- (18) "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.
- (19) "Garbage." Solid wastes generated from any domestic, commercial or industrial source.
- (20) "Grease interceptor." An interceptor whose rated flow is fifty gallons per minute (50 g.p.m.) or less and is generally located inside the building.
- (21) "Grease trap." An interceptor whose rated flow is fifty gallons per minute (50 g.p.m.) or more and is located outside the building.
- (22) "Holding tank waste." Any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks, and vacuum pump tank trucks.
- (23) "Incompatible pollutant." Any pollutant which is not a "compatible pollutant" as defined in this section.
- (24) "Interceptor." A device designed and installed to separate and retain for removal, by automatic or manual means, deleterious, hazardous or undesirable matter from normal wastes, while permitting normal sewage or waste to discharge into the drainage system by gravity.
- (25) "Interference." A discharge that, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts, treatment processes or operations, or sludge processes, use or disposal, or exceeds the design capacity of the treatment works or collection system.
- (26) "Local administrative officer." The chief administrative officer of the local hearing authority.

- (27) "Medical waste." Isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes, and dialysis wastes.
- (28) "Local hearing authority." The City of Tusculum Board of Mayor and Commissioner or such person or persons appointed by the board to administer and enforce the provisions of this chapter and conduct hearings pursuant to § 18-212.
- (29) "NPDES (National Pollution Discharge Elimination System)." The program for issuing, conditioning, and denying permits for the discharge of pollutants from point sources into navigable waters, the contiguous zone, and the oceans pursuant to section 402 of the Clean Water Act as amended.
- (30) "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.
- (31) "pH." The logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in grams per liter of solution.
- (32) "Pollution." The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.
- (33) "Pollutant." Any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical waste, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste and certain characteristics of wastewater (e.g., pH, temperature, turbidity, color, BOD, COD, toxicity, or odor discharge into water).
- (34) "Prohibited discharge standards" or "prohibited discharges." Absolute prohibitions against the discharge of certain substances; these prohibitions appear in § 18-211 of this chapter.
- (35) "Septic tank waste." Any sewage from holding tanks such as vessels, chemical toilets, campers, trailers, and septic tanks.
- (36) "Sewage." Human excrement and gray water (household showers, dishwashing operations, etc.).
 - (37) "Shall" is mandatory; "may" is permissive.
 - (38) "State." The State of Tennessee.
- (39) "Storm sewer" or "storm drain." A pipe or conduit which carries storm and surface waters and drainage, but excludes sewage and industrial wastes. It may, however, carry cooling waters and unpolluted waters, upon approval of the superintendent.
- (40) "Stormwater." Any flow occurring during or following any form of natural precipitation and resulting therefrom.
- (41) "Superintendent." The local administrative officer or person designated by him to supervise the operation of the publicly owned treatment

works and who is charged with certain duties and responsibilities by this chapter, or his duly authorized representative.

- (42) "Surcharge." An additional fee assessed to a user who discharges compatible pollutants at concentrations above the established surcharge limits.
- (43) "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.
- (44) "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.
- (45) "User." The owner, tenant or occupant of any lot or parcel of land connected to a sanitary sewer, or for which a sanitary sewer line is available if a municipality levies a sewer charge on the basis of such availability, <u>Tennessee Code Annotated</u>, § 68-221-201.
- (46) "Wastewater." The liquid and water carried industrial or domestic wastes from dwellings, commercial buildings, and institutions, whether treated or untreated, which is contributed into or permitted to enter the wastewater collection system.
- (47) "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. (Ord. #14-01, June 2014)

18-204. <u>Abbreviations</u>. The following abbreviations, when used in this chapter, shall have the designated meanings:

,	e e
BOD	Biochemical Oxygen Demand
BMP	Best Management Practice
BMR	Baseline Monitoring Report
CFR	Code of Federal Regulations
COD	Chemical Oxygen Demand
EPA	Environmental Protection Agency
TDEC	Tennessee Department of Environment and Conservation
gpd	gallonsper day
mg/l	milligrams per liter
NPDES	National Pollutant Discharge Elimination System
RCRA	Resource Conservation and Recovery Act
TSS	Total Suspended Solids
U.S.C.	United States Code
gpm	gallons per minute (Ord. #14-01, June 2014)

18-205. Private waste disposal required. (1) It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner

on public or private property within the service area of the city, any human excrement, garbage, or other objectionable waste.

- (2) It shall be unlawful to discharge to any waters of the state within the service area of the city any sewage or other polluted waters, except where suitable treatment has been provided in accordance with provisions of this chapter or city or state regulations.
- (3) Except as herein provided, it shall be unlawful to construct or maintain any privy, privy vault, cesspool, or other facility intended or used for the disposal of sewage.
- Except as provided in subsection (6) below, the owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes situated within the service area in which there is now located or may in the future be located a public sanitary sewer, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper private or public sewer in accordance with the provisions of this chapter. Where public sewer is available property owners shall within sixty (60) days to connect to the public sewer. Service is considered "available" when a public sewer main is located in an easement, right-of-way, road or public access way which abuts the property. Nothing herein shall, however, require current buildings existing on April 1, 2014, located on properties along and adjacent to East Andrew Johnson Highway within the city limits of Tusculum, Tennessee, whether residential or commercial, to connect to the initial wastewater collection system unless such property has been cited by TDEC for a failing private disposal system. All buildings constructed on said properties after April 1, 2014, will be required to connect to the system according to the conditions set forth herein.
- (5) Where a public sanitary sewer is not available under the provisions of subsection (4) above, the building sewer shall be connected to a private sewage disposal system complying with the provisions of § 18-206 of this chapter.
- (6) The owner of a manufacturing facility may discharge wastewater to the waters of the state provided that he obtains an NPDES permit and meets all requirements of the Federal Clean Water Act, the NPDES permit, and any other applicable local, state, or federal statutes and regulations. (Ord. #14-01, June 2014)

18-206. Private domestic wastewater disposal. (1) Availability.

- (a) Where a public sanitary sewer is not available under the provisions of § 18-205(4), the building sewer shall be connected, until the public sewer is available, to a private wastewater disposal system complying with the provisions of the applicable local and state regulations.
- (b) The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the

- city. When it becomes necessary to clean septic tanks, the sludge may be disposed of only according to applicable federal and state regulations.
- (c) Where a public sewer becomes available, the building sewer shall be connected to said sewer within sixty (60) days. Nothing herein shall, however, require current buildings existing on April 1, 2014, located on properties along and adjacent to East Andrew Johnson Highway within the city limits of Tusculum, Tennessee, whether residential or commercial, to connect to the initial wastewater collection system unless such property has been cited by TDEC for a failing private disposal system. All buildings constructed on said properties after April 1, 2014, will be required to connect to the system according to the conditions set forth herein.
- (2) Requirements. (a) The type, capacity, location and layout of a private sewerage disposal system shall comply with all local or state regulations. Before commencement of construction of a private sewerage disposal system, the owner shall first obtain a written approval from the county health department. The application for such approval shall be made on a form furnished by the county health department which the applicant shall supplement with any plans or specifications that the department has requested.
- (b) Approval for a private sewerage disposal system shall not become effective until the installation is completed to the satisfaction of the local and state authorities, who shall be allowed to inspect the work at any stage of construction.
- (c) The type, capacity, location, and layout of a private sewage disposal system shall comply with all recommendations of the Tennessee Department of Environment and Conservation, and the county health department. No septic tank or cesspool shall be permitted to discharge to waters of Tennessee.
- (d) No statement contained in this chapter shall be construed to interfere with any additional or future requirements that may be imposed by the city or county health department. (Ord. #14-01, June 2014)
- 18-207. Connection to public sewers. (1) Sewer connection required. Every building having plumbing fixtures installed and intended for human habitation, occupancy, or use on premises abutting a street, alley, or easement in which segment there is a sanitary sewer which is adjacent to the property line of the parcel containing the building shall be considered as being served by the city's sanitary sewer system. The city shall make any decision as to the availability of sewer service to a premise. All premises served by the city sanitary sewer are subject to sewer user charges as described in § 18-216, whether connected to the city's sewer or not.

All new buildings hereafter constructed on property which is served by the city's sewer system shall not be occupied until the connection has been made. Septic tanks shall not be used for new buildings where sanitary sewers are available.

- (2) <u>Unconnected sewer service lines prohibited where connection is available</u>. Except for discharge to a properly functioning septic tank system approved by the county health department or discharges permitted by a National Pollutant Discharge Elimination System permit (hereinafter NPDES) issued by the TDEC, the discharge of sewage into places other than the city's sewer system is prohibited. The owner or occupant of each lot or parcel of land which is now served or which may hereafter be served by the city's sewer system shall cease to use any other method for the disposal of sewage except as approved for direct discharge by the TDEC or by discharge to a properly functioning and approved septic tank system.
 - Application for service. (a) There shall be two (2) classifications of residential and commercial and other nonresidential establishments. In either case, the owner or his agent shall make application for connection on a special form furnished by the city. Applicants for service to commercial and industrial establishments shall be required to furnish information about all waste producing activities, wastewater characteristics and constituents. The application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the superintendent. Details regarding commercial and industrial permits include but are not limited to those required by this chapter. Service connection fees for establishing new sewer service are paid to the city at the time of application. The receipt by the city of a prospective customer's application for connection shall not obligate the city to render the connection. If the service applied for cannot be supplied in accordance with this chapter and the city's rules and regulations and general practice, or state and federal requirement, the connection charge will be refunded in full, and there shall be no liability of the city to the applicant for such service.
 - (b) Users shall notify the city of any proposed new introduction of wastewater constituents or any proposed change in the volume or character of the wastewater being discharged to the system a minimum of sixty (60) days prior to the change. The city may deny or limit this new introduction or change based upon the information submitted in the notification.
 - (c) Multi-user private sewer systems. The owner or operator of a private sewer system such as, but not limited to, multi-tenant buildings, building complexes, and shopping centers shall be responsible for the quality of wastewater discharged at the point of connection to the city's sanitary sewer system and shall be responsible for any violations of the provisions of this chapter, including liability for the damage or

injury caused to the city's system as a result of any discharge through the private system.

- (4) Prohibited connections. No person shall make connections of roof downspouts, sump pumps, basement wall seepage or floor seepage, exterior foundation drains, area way drains, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer. Any such connections which already exist on the effective date of this chapter shall be completely and permanently disconnected within sixty (60) days of the effective date of this chapter. The owners of any building sewer having such connections, leaks or defects shall bear all of the costs incidental to removal of such sources. Pipes, sumps and pumps for such sources of ground water shall be separate from the sanitary sewer.
 - (5) Physical connection a public sewer. (a) No person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof. The city shall make all connections to the public sewer upon the property owner first submitting a connection application to the city. The connection application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the superintendent. A service connection fee shall be paid to the city at the time the application is filed. The applicant is responsible for excavation and installation of the building sewer which is located on private property. The city will inspect the installation prior to backfilling and make the connection to the public sewer.
 - (b) All costs and expenses incident to the installation, connection, and inspection of the building sewer shall be borne by the owner including all service and connection fees. The owner shall indemnify the city from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.
 - (c) A separate and independent building sewer shall be provided for every building; except where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, courtyard, or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer. Where property is subdivided and buildings use a common building sewer are now located on separate properties, the building sewers must be separated within sixty (60) days.
 - (d) Old building sewers may not be re-used to connect to the new septic tank. The property owner shall install a new sewer line from the building to septic tank meeting the criteria set forth herein.
 - (e) Building sewers shall conform to the following requirements:

- (i) Definition. A standard sanitary sewer service line is a four inch or six inch (4" or 6") pipe extending from the building to Septic Tank Effluent Pumping system (STEP) (see § 18-208 for STEP information).
- (ii) The construction and installation of all building sewers shall be in accordance with the requirements of the latest edition of the plumbing code published by the International Code Council. The city may establish additional requirements or standards for materials and methods of installation in accordance with good engineering practice.

Four-inch (4") building sewers shall be laid on a grade of at least one percent (1%). Larger building sewers shall be laid on a grade that will produce a velocity when flowing full of at least two feet (2') per second. The slope and alignment of all building sewers shall be neat and regular and shall be bedded in material suitable to achieve proper slope and alignment. A separate and independent building sewer shall be provided for every building; except where one (1) building stands at the rear of another as 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 (1) building sewer. Building sewers shall be constructed only one (1) of the following approved materials:

- (A) Cast iron soil pipe using rubber compression joints of approved type;
- (B) SDR-35 PVC pipe with push-on, gasketed joints.
- (C) Similar materials of equal or superior quality following city approval. Under no circumstances will cement mortar joints be acceptable.
- (iii) Cleanouts shall be provided to allow cleaning in the direction of flow. A cleanout shall be located five feet (5') outside of the building, as it crosses the property line and one at each change of direction of the building sewer which is greater than forty-five degrees (45°). Additional cleanouts shall be placed not more than seventy-five feet (75') apart in horizontal building sewers of six inch (6") nominal diameter and not more than one hundred feet (100') apart for larger pipes. Cleanouts shall be extended to or above the finished grade level directly above the place where the cleanout is installed and protected from damage. A "Y" (wye) and one-eighth (1/8) bend shall be used for the cleanout base. Cleanouts shall not be smaller than four inches (4").

Blockages on the property owner's side of the property line cleanout are the responsibility of the property owner.

- (iv) "Building sewers" shall be connected to a baffled septic tank per requirements of § 18-208. A forcemain sewer service line shall be installed from the septic tank to the public sewer main. Connections of forcemain service line to the public sewer system shall be made only by the city and shall be made at the appropriate existing wyes or tee branch using compression type couplings or collar type rubber joint with stainless steel bands. Where existing wye or tee branches are not available, connections of building services shall be made by either removing a length of pipe and replacing it with a wye or tee fitting using flexible neoprene adapters with stainless steel bands of a type approved by the superintendent. Bedding must support pipe to prevent damage or sagging. All such connections shall be made gastight and watertight.
- (v) The methods to be used in excavating, placing of pipe, jointing, testing, backfilling the trench, or other activities in the construction of a building sewer which have not been described above shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the city or to the procedures set forth in appropriate specifications by the ASTM. Any deviation from the prescribed procedures and materials must be approved by the superintendent before installation.
- (vi) An installed building sewer shall be gastight and watertight.
- (f) All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the city.
- (g) No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, basement drains, sump pumps, or other sources of surface runoff or groundwater to a building directly or indirectly to a public sanitary sewer.
 - (h) Inspection of connections.
- (i) The sewer connection and all building sewers from the building to the public sewer main line shall be inspected before the underground portion is covered, by the superintendent or his authorized representative.
- (ii) The applicant for discharge shall notify the superintendent when the building sewer is ready for inspection and connection to the

public sewer. The connection shall be made under the supervision of the superintendent or his representative.

(6) <u>Maintenance of building sewers</u>. (a) Each individual property owner shall be entirely responsible for the construction, maintenance, repair or replacement of the building sewer between the building and septic tank. Owners failing to maintain or repair building sewers or who allow stormwater or ground water to enter the sanitary sewer may face enforcement action by the superintendent up to and including discontinuation of sewer service.

The city shall be responsible for maintenance of the septic tank, pumps, controls, alarms, and the service force main from the septic tank to the public force main sewer after the initial approved installation is paid for by the property owner.

- (b) The city may inspect the facilities of any user to ascertain whether the purpose of this chapter is being met and all requirements are being complied with.
- (c) The city will service the septic tank, pump, alarm, and controls at the septic tank effluent pumping system. The property owner shall allow the city full access to maintain and service the equipment.
- (7) <u>Sewer extensions</u>. All expansion or extension of the public sewer constructed by property owners or developers must follow policies and procedures developed by the city. In the absence of policies and procedures the expansion or extension of the public sewer must be approved in writing by the superintendent or manager of the wastewater collection system. All plans and construction must follow the latest edition of Tennessee Design Criteria for Sewerage Works, located at:

http://www.state.tn.us/environment/wpc/publications/.

Contractors must provide the superintendent or manager with as-built drawing and documentation that all mandrel, pressure and vacuum tests as specified in design criteria were acceptable prior to use of the lines. Contractor's one (1) year warranty period begins with occupancy or first permanent use of the lines. Contractors are responsible for all maintenance and repairs during the warranty period and final inspections as specified by the superintendent or manager. The superintendent or manager must give written approval to the contractor to acknowledge transfer of ownership to the city. Failure to construct or repair lines to acceptable standards could result in denial or discontinuation of sewer service. (Ord. #14-01, June 2014)

- 18-208. <u>Septic tank effluent pump</u>. Septic Tank Effluent Pump (STEP) systems shall be installed on owner's property by all users connecting to the city's sewer system.
- (1) <u>Equipment requirements</u>. (a) Septic tanks shall be of water tight construction, structurally sound, and must be approved by the city. Tanks shall be owned by the property owner; tanks shall be maintained by the city.

- (b) Pumps must be approved and be maintained by the city.
- (c) Approved pump models include A.Y. McDonald 22000 and 24000 Series Pumps and Orenco PF Series Pumps.
- (d) Residential users may use a simplex pump. Commercial users shall be required to have a duplex pumping system.
- (e) Alarms shall be provided for low water level, high water level, and pump failure.
- (2) <u>Installation requirements</u>. Location of tanks, pumps, and effluent lines shall be subject to the approval of the city. The effluent pump shall be located within a screened pump vault. The vault, at a minimum, shall be fitted with one-eighth inch (1/8") mesh polyethylene screen and a four inch (4") diameter PVC (or equivalent) flow inducer for high-head pump. The pump chamber shall include float switches that turn the pump on and off and activate high and low level alarms. Residential effluent service lines connecting the STEP system to the sewer forcemain shall be of one inch (1") PolyFlex (STR-9 Class 200) pipe or approved equal. Commercial connections shall be at a minimum of two inch (2") PolyFlex (STR-9 Class 200) pipe or approved equal and subject to approval by the city. Installation shall follow design criteria for STEP system as provided by the superintendent and TDEC Design Criteria for Sewage Works.

The location of septic tanks shall be selected in accordance with the following minimum distances in feet, bearing in mind that local conditions may require increased distances of separation.

	Septic Tank (ft)
Water supply	50
Dwellings	5
Property lines	10
*Gullies, ravines, dry stream beds, natural drainage ways, sinkholes, streams, and cut banks	15
Water lines	10

*These distances may increase or decrease as soil conditions so warrant as determined by the commissioner after a special investigation by an approved soil consultant.

- (3) <u>Costs</u>. STEP equipment for new construction shall be purchased and installed at the user's expense according to the specifications of the city. Connection will be made to the city sewer only after inspection and approval of the city.
- (4) <u>Ownership and easements</u>. The city shall maintain ownership of the pumps, alarms, controls, and force main service line. The property owner

shall maintain ownership of the septic tank. Property owners shall pay the city (through user fees) for operation and maintenance of the STEP system. Access by the city to the STEP system must be guaranteed to operate, maintain, repair, restore service, and remove sludge. Access manholes, ports, and electrical disconnects must not be locked, obstructed or blocked by landscaping or construction. The city may charge the property owner for nuisance maintenance activities. The city will bill the property owner, based on the actual cost, for maintenance activities resulting from the property owner's misuse of the system. For example, activities may include frequent removal of solids, fats, oils, or grease.

- (5) Existing septic tanks. Existing septic tanks shall be removed or abandoned in place. Standard method of abandonment. The tank subject to abandonment shall be pumped, and its contents disposed, in accordance with local, state, and federal requirements, collapsed, and the remaining hole back-filled and compacted with coarse gravel to within twelve inches (12") of ground surface. The remaining space is to be filled with topsoil to the surrounding grade and appropriately crowned to allow for soil settling.
 - (6) <u>Use of STEP systems</u>. (a) Home or business owners shall follow the STEP users guide provided by the superintendent.
 - (b) Home or business owners shall provide an electrical connection that meets specifications and shall provide electrical power. Namely, the property owner shall provide a 220V power circuit run from a dedicated 30Amp, double pole breaker to a disconnect located on the building wall immediately adjacent to the tank site. The circuit must consist of 10/3 wire with a ground. The disconnect shall be accessible at all times to the city and authorized maintenance staff.
 - (c) Home or business owners shall be responsible for maintenance and installing sewer lines from the building to the STEP tank.
 - (d) Maintenance of the STEP tank, pumps, controls, and alarms shall be as provided in § 18-208(4).
 - (e) Prohibited uses of the STEP system.
 - (i) Connection of roof guttering, sump pumps or surface drains.
 - (ii) Disposal of toxic household substances.
 - (iii) Use of garbage grinders or disposers.
 - (iv) Discharge of pet hair, lint, or home vacuum water.
 - (v) Discharge of fats, grease, and oil.
- (7) <u>Tank cleaning</u>. Solids removal from the septic tank shall be provided by the city. Septic tanks should be pumped when sludge and scum accumulations exceed thirty percent (30%) of the tank volume or are encroaching on the inlet and outlet baffle entrances. Periodic pumping of the septic tanks is recommended to ensure proper system performance and reduce the risk of hydraulic failure. If systems are not inspected, septic tanks should

be pumped every three (3) to five (5) years depending on the size of the tank, the number of building occupants, and household appliances and habits. Commercial systems should be inspected and/or pumped more frequently, typically annually.

- (8) <u>Additional charges</u>. The city shall be responsible for maintenance of the STEP equipment, and shall charge the user a monthly fee to cover the cost of equipment maintenance and replacement. Repeat service calls for similar problems shall be billed to the property owner or business at a rate of no more than the actual cost of the service call. (Ord. #14-01, June 2014)
- **18-209.** <u>Septic tank capacity</u>. (1) <u>Residential septic tank capacity</u>. For residences, the effective liquid capacity of the septic tank shall be a minimum of one thousand five-hundred (1,500) gallons. The minimum one thousand five-hundred (1,500) gallon liquid capacity requirement will be implemented and enforced at the discretion of the city.
- (2) Commercial septic tank capacity. For facilities other than residences, the net volume or effective liquid capacity of the septic tank shall be determined by accounting for a minimum hydraulic retention time of three (3) days in order to allow for adequate settling of solids. The minimum effective liquid capacity of the septic tank shall be one thousand five-hundred (1,500) gallons. In some instances (restaurants, grocery stores, etc.), a grease trap will be required in addition to the septic tank. Additional tank volume may be necessary where unusual waste water characteristics are expected from a commercial facility. The minimum three (3) day hydraulic retention time will be implemented and enforced at the discretion of the city.

(Commercial users may be required to use two (2) tanks operating in series to achieve volumetric requirements. The first tank shall have an effluent filter screen installed between the effluent pipe of the first tank and the influent pipe of the second. The filter should be inspected and cleaned routinely.)

- (3) Effective liquid capacity. The actual effective liquid capacity of a tank to be utilized as a septic tank shall be considered the volume of liquid capacity that occupies the interior space of said tank to the level of the invert of the outlet port of the tank. Therefore, the air-space that lies above the actual surface of the liquid level of a tank shall not be considered as part of a septic tank's effective liquid capacity. (Ord. #14-01, June 2014)
- 18-210. <u>Design of septic tanks</u>. (1) <u>Overview of septic tank design</u>. A septic tank shall be watertight, structurally sound, and not subject to excessive corrosion or decay. Septic tanks shall be of two (2) compartment design. The inlet compartment of a two (2) compartment tanks shall be between two-thirds (2/3) and three-fourths (3/4) of the total tank capacity.
 - (2) <u>Minimum standards of design and construction of precast reinforced concrete septic tanks</u>. (a) Septic tanks shall be precast concrete

and provided by an NCPA certified plant in good standing with the State of Tennessee.

- (b) Tank shall meet watertight requirements and testing per ASTM C1227 using the hydrostatic test. Tanks failing the test will not be accepted for connection to the city's system. Proof of testing shall be required to be submitted to the city.
- (c) Tanks shall be structurally sound, with steel rebar reinforcement and five thousand (5,000) psi strength (twenty-eight (28) day) concrete. Tanks shall be designed and sealed by a Tennessee licensed professional engineer.
- (d) Sealant used in the seam of the tank shall be mastic sealant meeting or exceeding ASTM C990.
- (e) Pipe penetrations (inlet and outlet) shall be fitted with seals that meet or exceed ASTM C923.
- (f) Inlet tees shall be required and shall conform to ASTM 1785 standards. Inlet tees shall be installed with a rubber boot poured into the tank wall, and shall be secured using #88 stainless steel bands.
- (g) A twenty-four inch (24") diameter access opening shall be installed above the inlet pipe and effluent pump. Water-tight PRTA adaptors shall be cast-in-place or fastened to the top of the tank with stainless steel concrete anchors and a roll of butyl tape. The adaptor shall be sealed with clear all-purpose Lexel silicone. A watertight Ultra-corr/Ultra rib riser shall be connected to the adaptor and extended to the finished ground elevation. The riser shall be sealed with all-purpose Lexel silicone. The riser shall be equipped with a twenty-four inch (24") diameter water tight lid. The lid shall be structural foam and fastened to the riser with four (4) 12x2 stainless steel self-tapping, #3 square drive mounting screws.
- (h) Partition wall (or baffle) shall be poured monolithically and shall be structurally sound.
- (i) Air space shall be a minimum of eight inches (8") above top of the inlet pipe.
- (j) Tank labeling. Precast septic tanks shall be provided with a suitable legend, cast or etched in the wall at the outlet end and within six inches (6") of the top of the tank, identifying the manufacturer by name and address or registered trademark and indicating the liquid capacity of the tank in gallons.
- (3) Cast-in-place provisions. Not allowed unless explicitly approved by the city in writing. (Ord. #14-01, June 2014)
- **18-211.** <u>Discharge regulations</u>. (1) General discharge prohibitions. No user shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will pass through or interfere with the operation and performance of the Wastewater Treatment Plant (WWTP) / Publicly Owned

Treatment Works (POTW). These general prohibitions apply to all such users of the sewer system. Violations of these general and specific prohibitions or the provisions of this section may result in surcharges, discontinuance of sewer service, and other fines and provisions of § 18-212. A user may not contribute the following substances to any STEP system or the wastewater collection system as a whole:

- (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 wastewater collection system or to the operation of the wastewater collection system. Prohibited flammable materials including, but not limited to, wastestreams with a closed cup flash point of less than one hundred forty degrees Fahrenheit (140° F) or sixty degrees Centigrade (60° C) using the test methods specified in 40 CFR 261.21. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromate, carbides, hydrides and sulfides and any other substances which the city, the state or EPA has notified the user is a fire hazard or a hazard to the system.
- (b) Any wastewater having a pH less than 5.5 or higher than 9.5 or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment, and/or personnel of the wastewater collection system.
- (c) Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities including, but not limited to: grease, garbage with particles greater than one half inch (1/2") in any dimension, waste from animal slaughter, human hair, pet hair, non-dissolvable sanitary wipes, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, mud, or glass grinding or polishing wastes.
- (d) Any pollutants, including oxygen demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which will cause interference to the wastewater collection system.
- (e) Any wastewater having a temperature which will inhibit biological activity in the wastewater collection system resulting in interference, but in no case wastewater with a temperature at the introduction into the wastewater collection system which exceeds forty degrees Centigrade (40° C) (one hundred four degrees Fahrenheit (104° F)) unless approved by the State of Tennessee.
- (f) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.

- (g) Pollutants which result in the presence of toxic gases, vapors, or fumes within the wastewater collection system in a quantity that may cause acute worker health and safety problems.
- (h) Any wastewater containing any toxic pollutants, chemical elements, or compounds in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans, including wastewater collection system operators, or animals, create a toxic effect in the receiving waters of the STEP system. A toxic pollutant shall include but not be limited to any pollutant identified pursuant to section 307 of the Act.
- (i) Any waters containing, any radioactive wastes or isotopes of such halflife or concentration as may exceed limits established by the superintendent in compliance with applicable state or federal regulations.
- (j) Any wastewater which causes a hazard to human life or creates a public nuisance.
- (k) Any waters or wastes containing animal or vegetable fats, wax, grease, or oil, whether emulsified or not, which cause accumulations of solidified fat in pipes, septic tanks and pumping equipment.
- (l) Detergents, surfactants, surface-acting agents or other substances which may cause excessive foaming in the STEP system or pass through of foam.
- (m) Any stormwater, surface water, groundwater, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer. Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers, or to a natural outlet approved by the superintendent and the Tennessee Department of Environment and Conservation. Industrial cooling water or unpolluted process waters may be discharged on approval of the superintendent and the Tennessee Department of Environment and Conservation, to a storm sewer or natural outlet.
- (n) Medical wastes, except as specifically authorized by (the superintendent) in an individual wastewater discharge permit.
- (2) <u>Fats, oils, and grease (FOG)</u>. FOG traps and interceptors, waste food and sand interceptors shall be installed when, in the opinion of the superintendent, they are necessary for the proper handling of liquid wastes containing fats, oils, and grease, any flammable wastes, ground food waste, sand, soil, and solids, or other harmful ingredients in excessive amount which impact the wastewater collection system. Such traps and interceptors shall not be required for single family residences, but may be required on multiple family residences and commercial facilities. All traps and interceptors shall be of a type and capacity approved by the superintendent, and shall be located as to be readily and easily accessible for cleaning and inspection.

- (a) Grease trap and interceptor design criteria. Grease traps and interceptors must be designed to satisfy three (3) basic criteria in order to ensure effective separation. These include:
 - (i) Time. The separation device must provide sufficient retention time for emulsified grease and oil to separate and float to the surface of the chamber.
 - (ii) Temperature. The separation device must provide adequate volume to allow the wastewater to cool sufficiently for emulsified grease to separate.
 - (iii) Turbulence. Turbulence through the device must be controlled so that grease and solids are kept in suspension in the wastewater. Turbulence must be controlled, especially during high discharge rates associated with draining a multiple fixtures simultaneously.
 - (iv) Performance. In addition, the grease trap and/or interceptor must provide sufficient storage capacity for accumulated grease and solids between cleanings. The grease trap/interceptor shall be designed to ensure that the effluent does not have a FOG concentration in excess of one hundred (100) mg/L.
- (b) Grease interceptors. Grease interceptors may be used if the commercial facility's combined flow rate of FOG is less than fifty (50) gpm and grease storage capacity is less than one hundred (100) pounds. Grease interceptors shall be approved by the city and cleaned and maintained by the user. In all instances where a grease interceptor is required, it shall be installed upstream of the septic tank. Commercial dishwashers shall not be connected to a grease interceptor, and discharge from dishwasher shall bypass to the septic tank.
- Grease traps. Kitchen drain lines from institutions, hotels, restaurants, schools, lunchrooms, and other establishments from which flow a relatively high combined flow rate of FOG (typically fifty (50) gpm or greater) shall be discharged to a grease trap if a grease interceptor has been determined inadequate. FOG shall be discharged into a grease trap before being discharged into a septic tank. Grease trap effluent shall also be treated in the septic tank before being discharged into the wastewater collection system. Grease traps shall be constructed to insure both the inlet and outlet are properly submerged to trap grease and that the distance between inlet and outlet is sufficient to allow separation of the grease so that grease solids will not escape through the outlet. Grease traps shall be vented so they will not become air bound. A cover shall be provided and located so as to be conveniently accessible for servicing and cleaning. The cover shall be designed to prevent odor and exclude insects and vermin. Proper sizing of the grease trap should be based on efficiency ratings and flow capacities, which are determined by the number and

kinds of sinks or fixtures discharging into the trap (See Appendix B¹ for details). A detailed list of grease trap design features includes the following:

- (i) Construction. Traps shall be constructed of durable, watertight materials, with sufficient structural load bearing capacity for use in traffic areas. Grease traps should be designed with at least two (2) compartments separated by a full width baffle. The baffle should be located approximately two-thirds (2/3) to three-fourths (3/4) from the influent wall and extend above the liquid level. No trap filters are to be used due to clogging concerns.
- (ii) Access. Access for cleaning should be provided by two (2) twenty-four inch (24") diameter manholes terminating one inch (1") above finished grade with sealed cast iron frames and cover. Manholes should be located above the inlet and outlet tees.
- (iv) Inlets and outlets. Sanitary tees should be installed vertically on the inlet and outlet pipes. Tees should be the same size as the inlet and outlet piping, but not less than four inches (4") in diameter. A pipe nipple with open top should be installed in the top of the tee and should terminate six inches (6") below the roof of the trap. The inlet tee should have a vertical pipe drop extending twelve inches (12") below the water surface. The outlet tee should have a vertical pipe drop extending to one-third (1/3) of liquid level capacity from the floor. The elevation of the inlet pipe should be approximately two and one half inches (2 1/2") above the elevation of the outlet pipe.
- (v) Location. Grease traps should be located just outside the restaurant or kitchen in an easily accessible location out of the way of normal traffic. However, the trap should not be located in flood prone areas. Outdoor installation is preferred due to accessibility. However, indoor installation may be approved by the city in special circumstances.

In all instances where a grease trap is required, it shall be installed upstream of the septic tank.

- (vi) Prohibited discharges. Sanitary wastewater (blackwater) shall connect to the drain line downstream of the grease trap. Garbage grinders are not allowed. Commercial dish washers shall not be connected to the grease trap and shall directly connect to the septic tank.
- (vii) Sizing. Grease traps should be designed based on flow rate and storage capacity, modified by a loading factor that takes into account the type or location of the commercial facility. (See

¹Appendix B is included in this municipal code in its entirety.

Appendix B for examples of grease trap sizing formulas.) The minimum size for a single grease trap shall be one thousand (1,000) gallons, and the minimum hydraulic detention time shall be four (4) hours at design flow. The owner may consider the use of multiple smaller capacity grease traps in series rather than a single large trap as long as the combined total capacity of the traps is one thousand (1,000) gallons or more.

- (viii) Cleaning. Grease traps must be inspected and cleaned at regularly scheduled intervals as dictated by on-site experience, but generally once every three (3) months. Solids and oil removal from the grease trap shall be the responsibility of the user, and shall be disposed of per local, state, and federal requirements. If cleaning is found to be necessary within less than a one (1) month period, then the grease trap may be determined to be undersized. (d) FOG application and implementation plan. (i) New construction and renovation. Upon construction or renovation, all restaurants, cafeterias, hotels, motels, hospitals, nursing homes, schools, grocery stores, prisons, jails, churches, camps, caterers, manufacturing plants and any other sewer users who discharge applicable waste shall submit a FOG and food waste control plan that will effectively control the discharge of FOG and food waste.
- (ii) Existing structures. All existing restaurants, cafeterias, hotels, motels, hospitals, nursing homes, schools, grocery stores, prisons, jails, churches, camps, caterers, manufacturing plants and any other sewer users who discharge applicable waste shall be required to submit a plan for control of FOG and food waste, if and when the superintendent determines that FOG and food waste are causing excessive loading, plugging, damage or potential problems to structures or equipment in the public sewer system.
- (iii) Implementation of plan. After approval of the FOG plan by the superintendent the sewer user must:
 - (A) Implement the plan as determined by the local hearing authority;
 - (B) Service and maintain the equipment in order to prevent impact upon the sewer collection system and treatment system. If, in the opinion of the superintendent, the user continues to impact the collection system and treatment system, additional measures may be required. The FOG application and implementation plan can be found in Appendix B.
- (3) <u>Sand and soil interceptors</u>. At the discretion of the superintendent, all car washes, truck washes, garages, service stations and other sources of sand and soil shall install effective sand and soil interceptors. These interceptors

shall be sized to effectively remove sand and soil at the expected flow rates. The interceptors shall be cleaned on a regular basis to prevent impact upon the wastewater collection and treatment system. Owners whose interceptors are deemed to be ineffective by the superintendent may be asked to change the cleaning frequency or to increase the size of the interceptors. Owners or operators of washing facilities will prevent the inflow of rainwater into the sanitary sewers.

- (4) <u>Laundries</u>. Commercial laundries shall be equipped with an interceptor with a wire basket or similar device, removable for cleaning, that prevents passage into the sewer system of solids one-half inch (1/2") or larger in size such as strings, rags, buttons, or other solids detrimental to the system.
- (5) Control equipment. The The equipment of facilities installed to control FOG, food waste, sand and soil, must be designed in accordance with the Tennessee Department of Environment and Conservation engineering standards or applicable city guidelines. Underground equipment shall be tightly sealed to prevent inflow of rainwater and easily accessible to allow regular maintenance. Control equipment shall be maintained by the owner or operator of the facility so as to prevent a stoppage of the public sewer, and the accumulation of FOG in the lines, pump stations and treatment plant. If the city is required to clean out the public sewer lines as a result of a stoppage resulting from poorly maintained control equipment, the property owner shall be required to refund the labor, equipment, materials and overhead costs to the city. Nothing in this subsection shall be construed to prohibit or restrict any other remedy the city has under this chapter, or state or federal law. The city retains the right to inspect and approve installation of control equipment.
- (6) <u>Solvents prohibited</u>. The use of degreasing or line cleaning products containing petroleum based solvents is prohibited. The use of other products for the purpose of keeping FOG dissolved or suspended until it has traveled into the collection system of the city is prohibited.
- (7) The superintendent may use wastewater discharge permits to regulate the discharge of fat, oil and grease. (Ord. #14-01, June 2014)
- 18-212. Enforcement and abatement. (1) General. Violators of these wastewater regulations may be cited to city court, general sessions court, chancery court, or other court of competent jurisdiction face fines, have sewer service terminated, or the city may seek further remedies as needed to protect the collection system, treatment plant, effluent disposal system, and public health. Repeated or continuous violation of this chapter is declared to be a public nuisance and may result in legal action against the property owner and/or occupant and the service line disconnected from sewer main. Upon notice by the superintendent that a violation has or is occurring, the user shall immediately take steps to stop or correct the violation. The city may take any or all the following remedies:

- (a) Cite the user to city or general sessions court, where each day of violation shall constitute a separate offense.
- (b) In an emergency situation where the superintendent has determined that immediate action is needed to protect the public health, safety or welfare, a public water supply or the facilities of the sewerage system, the superintendent may disconnect sewer service.
- (c) File a lawsuit in chancery court or any other court of competent jurisdiction seeking damages against the user, and further seeking an injunction prohibiting further violations by user.
- (d) Seek further remedies as needed to protect the public health, safety or welfare, the public water supply or the facilities of the sewerage system.
- (2) <u>Complaints and orders</u>. (a) Should the city have reason to believe that a violation of any provision of this chapter or orders of the city commission issued pursuant thereto has occurred, is occurring, or is about to occur, the city may order that a written complaint be served upon the alleged violator(s).
- (ii) The complaint shall specify the provision(s) of the order alleged to be violated or about to be violated, the facts alleged to constitute a violation thereof, and may order that necessary corrective action be taken within a reasonable time to be prescribed in such order, and shall inform the violators of the opportunity for a hearing before the city.
- (c) Any such order shall become final and not subject to review unless the person or persons named therein request by written petition a hearing before the city commissioner as provided in § 18-212(5), no later than thirty (30) days after the date such order is served; provided, however, that the city commission may review such final order on the same grounds upon which a court of the state may review default judgments.
- (3) Additional remedies. In addition to other remedies provided herein, the city may issue a show-cause notice to any user who appears to be violating any provision of this chapter to show cause why sewer service should not be discontinued. The notice shall include the nature of the violation with sufficient specificity as to the character of the violation and the date(s) which such violation(s) occurred to enable the user to prepare a defense. Such notice shall be mailed to the user by certified mail, return receipt requested, or shall be personally delivered to the user at least twenty (20) days prior to the proposed action, except in the event of an emergency. At the show-cause hearing, the user may present any defense to such charges, either in person or through submission of written or documentary proof. Following the hearing or opportunity for a hearing, the city may at the city's discretion order termination of sewer service if satisfied from all available proof that the violation was willful and the termination is necessary to abate the offending condition or to prevent

future violations. The city may terminate service for a period not to exceed one (1) year for a willful violation and may terminate service indefinitely to abate offending conditions or prevent future violations subject to the corrections of such conditions or violations by the user. Any violation of provisions of this chapter that is not corrected or abated following a notice and opportunity for a hearing shall be grounds for termination of sewer service.

- (4) Emergency termination of service. (a) When the city finds that an emergency exists in which immediate action is required to protect public health, safety, or welfare, the health of animals, fish, or aquatic life, a public water supply, or the facilities of the WWTP, the city may, without prior notice, issue an order reciting the existence of such an emergency and requiring that certain action(s) be taken as the city deems necessary to meet the emergency.
- (b) If the violator fails to respond or is unable to respond to the city's order, the city may take such emergency action as deemed necessary or contract with a qualified person(s) to carry out the emergency measures. The city may assess the person(s) responsible for the emergency condition for actual costs incurred by the city in meeting the emergency.
- (c) In the event such emergency action adversely affects the user, the city shall provide the user an opportunity for a hearing as soon as practicable thereafter to consider restoration of service upon abatement of the condition or other reasonable conditions. Following the hearing, the city may take any such authorized action should the proof warrant such action.
- (5) <u>Hearings</u>. (a) Any hearing or re-hearing brought before the city shall be conducted in accordance with the following:
 - (i) Upon receipt of a written petition from the alleged violator pursuant to his section, the city shall give the petitioner thirty (30) days' written notice of the time and place of the hearing, but in no case shall the hearing be held more than sixty (60) days from the receipt of the written petition unless the city and the petitioner agree to a postponement.
 - (ii) The hearing provided may be conducted by the city commission at a regular or special meeting. A quorum of the city commissioners must be present at the regular or special meeting in order to conduct the hearing.
 - (iii) A verbatim record of the rehearings of the hearings shall be made and filed with the city commission in conjunction with the findings of fact and conclusions of law made pursuant to subsection (vi) of this section. The transcript shall be made available to the petitioner or any party to a hearing upon payment of a charge set by the city to cover the costs of preparation.

- (iv) In connection with the hearing, the chairman shall issue subpoenas in response to any reasonable request by any party to the hearing requiring the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in the hearing. In case of contumacy or refusal to obey a notice of hearing or subpoena issued under this section, the chancery court of Greene County shall have jurisdiction upon the application of the city to issue an order requiring such person to appear and testify or produce evidence as the case may require. Failure to obey such order of the court is punishable by the court as contempt.
- (v) Any member of the city commission may administer oaths and examine witnesses.
- (vi) On the basis of the evidence produced at the hearing, the city commission shall make findings of fact and conclusion of law and enter such decisions and orders as in its opinion will best further the purposes sewer system and shall give written notice to such decisions and orders to the alleged violator. The order issued under this subsection shall be issued no later than thirty (30) days following the close of the hearing by the person or persons designated by the chairman.
- (vii) The decision of the city commission shall become final and binding on all parties unless appealed to the courts as provided in subsection (b).
- (viii) Any person to whom an emergency order is directed shall comply therewith immediately but on petition to the city commission shall be afforded a hearing as soon as possible, but in no case shall such hearing be held later than three (3) days from the receipt of such petition by the city commission.
- (ix) Upon agreement of all parties, the testimony of any person may be taken by deposition or written interrogatories. Unless otherwise agreed, the deposition shall be taken in a manner consistent with rules 26 through 33 of the Tennessee Rules of Civil Procedure, with the chairman to rule on such manners as would inquire a ruling by the court under said rules.
- (x) The party at the hearing bearing the affirmative burden of proof shall first call witnesses, which shall be followed by witnesses called by other party. Rebuttal witnesses shall be called in the same order. The chairman shall rule on any evidentiary questions arising during such hearing and shall make other rulings necessary or advisable to facilitate an orderly hearing subject to approval of the city commission. The city commission, the city, his representative, and all parties shall have the right to

examine any witness. The city commission shall not be bound by or limited to rules of evidence applicable to legal proceedings.

- (xi) Any person aggrieved by any order or determination of the city where an appeal is not otherwise provided by this section may appeal said order or determination to be reviewed by the city commission under the provisions of this section. A written notice of appeal shall be filed with the city and the chairman, and said notice shall set forth with particularity the action or inaction of the city complained of and the relief being sought by the person filing said appeal. A special meeting of the city commission may be called by the chairman upon the filing of such appeal, and the city commission may, at members' discretion, suspend the operation of the order or determination of the city on which is based the appeal until such time as the city commission has acted upon the appeal.
- (b) An appeal may be taken from any final order or other final determination of the city or city commission by any party who is or may be adversely affected thereby to the chancery court pursuant to the common law writ of certiorari set out in <u>Tennessee Code Annotated</u>, § 27-8-101, within sixty (60) days from the date such order or determination is made.
- (6) <u>Civil penalty</u>. (a) Any person who does any of the following acts or omissions shall be subject to a civil penalty of up to ten thousand dollars (\$10,000.00) per day for each day during which the act or omission continues or occurs:
 - (i) Violates any effluent standard or limitation imposed by this chapter.
 - (ii) Fails to allow or perform an entry, inspection, monitoring, or reporting requirement of this chapter.
 - (iii) Fails to pay user or cost recovery charges imposed by the city.
 - (iv) Violates a final determination or order of the city commission.
 - (b) Any civil penalty shall be assessed in the following manner:
 - (i) The city may issue an assessment against any person or user responsible for the violation.
 - (ii) Any person or user against whom an assessment has been issued may secure a review of such assessment by filing with the city a written petition setting forth the grounds and reasons for his objections and asking for a hearing on the matter involved before the city commission. If a petition for review of the assessment is not filed within thirty (30) days of the date the assessment is served, the violator shall be deemed to have consented to the assessment, and it shall become final.

- (iii) When any assessment becomes final because of a person's failure to appeal the city's assessment, the city may apply to the appropriate court for a judgment and seek execution of such judgment and the court, in such proceedings, shall treat a failure to appeal such assessment as a confession of judgment in the amount of the assessment.
- (iv) In assessing the civil penalty, the city may consider the following factors:
 - (A) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity.
 - (B) Damages to the city, including compensation for the damage or destruction of the facilities of the WWTP/POTW, which also includes any penalties, costs, and attorneys' fees incurred by the city as the result of the illegal activity, as well as the expenses involved in enforcing this section and the costs involved in rectifying any damages.
 - (C) Cause of the discharge or violation.
 - (D) The severity of the discharge and its effect upon the facilities of the WWTP and upon the quality and quantity of the effluent.
 - (E) Effectiveness of action taken by the violator to cease the violation.
 - (F) The technical and economic reasonableness of reducing or eliminating the discharge.
 - (G) The economic benefit gained by the violator.
- (v) The city may institute proceedings for assessment in the name of the City of Tusculum in the chancery court of the county in which all or part of the pollution of violation occurred.
- (vi) The city commission may establish by regulation a schedule of the amount of civil penalty which can be assessed by the city for certain specific violations or categories of violations.
- (vii) Any civil penalty assessed to a violator pursuant to this section may be in addition to any civil penalty assessed by the commissioner of environment and conservation for violations of <u>Tennessee Code Annotated</u>, § 69-3-115(a)(1)(F). Provided, however, the sum of penalties imposed by this section and by <u>Tennessee Code Annotated</u>, § 69-3-115(a) shall not exceed ten thousand dollars (\$10,000.00) per day for each day during which the act or omission continues or occurs.
- (7) <u>Judicial proceedings and relief</u>. The city may initiate proceedings in the chancery or circuit court of the county in which the activities occurred against any person or user who is alleged to have violated or is about to violate the wastewater regulations ordinance, <u>Tennessee Code Annotated</u>, §§ 69-3-123

through 69-3-129, § 18-212(6), or orders of the city commission. In such action, the city may seek, and the court may grant, injunctive relief and any other relief available in law or equity.

- (8) Assessment of damages to user. When the discharge of waste or any other act or omission cause an obstruction, damage, or any other impairment to the city's facilities which causes an expense or damages of whatever character or nature to the city, the city shall assess the expenses and damages incurred by the city to clear the obstruction, repair damage to the facility, and otherwise rectify any impairment, and bill the person responsible for the damage for reimbursement of all expenses and damages suffered by the city. If the person responsible refuses to pay, then the city shall forward a copy of the statement and documentation of all expenses to the city's attorney who shall be authorized to take appropriate legal action. (Ord. #14-01, June 2014)
- **18-213.** <u>City's right of revision</u>. The city reserves the right to establish, by ordinance or in individual wastewater discharge permits, more stringent standards or requirements on discharges to the WWTP consistent with the purpose of this chapter. (Ord. #14-01, June 2014)
- **18-214.** <u>Fees and billing</u>. (1) <u>Purpose</u>. It is the purpose of this section to provide for the equitable recovery of costs from users of the city's wastewater treatment and collection system including costs of operation, maintenance, administration, bond service costs, capital improvements, reserve funds, and equitable cost recovery of principal and interest payments for loan funds.
- (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 permit applications for discharge;
 - (c) Sewer use charges;
 - (d) Other fees as the city may deem necessary.
- (3) <u>Inspection fee and tapping fee</u>. An inspection fee and tapping fee for a building sewer installation shall be paid to the city at the time the application is filed.
- (4) <u>Sewer user charges</u>. The city shall establish monthly rates and charges for the use of the wastewater system and for the services supplied by the wastewater system.
- (5) Administrative civil penalties. Administrative civil penalties shall be issued according to the following schedule. Violations are categorized in the Enforcement Response Guide Table (Appendix B). The local administrative

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

officer may access a penalty within the appropriate range. Penalty assessments are to be assessed per violation per day unless otherwise noted.

No penalty
\$50.00\$500.00
\$500.00\$1,000.00
\$1,000.00\$5,000.00
\$5,000.00\$10,000.00

In addition to the penalties herein identified, the local administrative officer reserves the right to charge fees to the violating party as required for the recovery of operational expenses that were incurred as a result of the violation (i.e., POTW upset caused by violator's discharge alone or in combination with others). Operational expenses may include but shall not be limited to fines for NPDES violations, hourly labor and overtime labor, sampling, laboratory analysis, seeding of wastewater treatment plant, equipment repair, legal fees, professional service fees, and other incidental costs incurred by the POTW in response to damages caused by an illicit discharge. (Ord. #14-01, June 2014)

18-215. <u>Validity</u>. This chapter and its provisions shall be valid for all service areas, regions, and sewage works under the jurisdiction of the city. (Ord. #14-01, June 2014)