

TITLE 18**WATER AND SEWERS**¹**CHAPTER**

1. SEWAGE DISPOSAL.
2. SEWAGE.
3. CROSS CONNECTIONS, AUXILIARY INTAKES, ETC.
4. WATER, SEWERS, AND GAS.

CHAPTER 1**SEWAGE DISPOSAL****SECTION**

- 18-101. Definitions.
- 18-102. Use of public sewers required.
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18-101. Definitions. Unless the context specifically indicates otherwise, the meanings of terms used in this chapter shall be as follows:

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

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

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

¹Municipal code references

Building, utility and housing codes: title 12.

Refuse disposal: title 17.

(4) "C.O.D." (denoting chemical oxygen demand) shall mean the quantity of oxygen utilized in the oxidation of organic matter to carbon dioxide and water expressed in milligrams per liter by weight.

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

(6) "Compatible wastes" shall mean such wastes as Biochemical Oxygen Demand, Chemical Oxygen Demand, Settleable Solids, Total Dissolved Solids, and Nitrogen (total Kjeldahl).

(7) "Dissolved solids" shall mean all solids found in water, sewage, or other liquids, and which are not removable by laboratory filtering.

(8) "Incompatible waste" shall mean such wastes as outlined in Table 1.

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

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

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

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

(13) "pH" shall mean the logarithm of the reciprocal of the concentration of hydrogen ions in moles per liter of solution.

(14) "Properly shredded garbage" shall mean the wastes from the preparation, cooking, and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (1/2) inch (1.27 centimeters) in any dimension.

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

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

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

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

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

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

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

(22) "Slug" shall mean any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than

five (5) times the average twenty-four (24) hour concentration or flows during normal operation.

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

(24) "Superintendent" shall mean the superintendent of the Sewage Works and/or of Sewage Plant of the City of Rockwood, or his authorized deputy, agent, or representative.

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

(26) "Total solids" shall mean all the matter which remains as a residue after water, sewage and/or other liquids are subjected to evaporation at 105°C.

(27) "Watercourse" shall mean a channel in which a flow of water occurs, either continuously or intermittently. (1970 Code, § 8-701)

18-102. Use of public sewers required. (1) It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within the City of Rockwood, or in any area under the jurisdiction of said city, any human or animal excrement, garbage, or other objectionable waste.

(2) It shall be unlawful to discharge to any natural outlet within the City of Rockwood, or in any area under the jurisdiction of said city, any sewage or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this chapter.

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

(4) The owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the city, and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a public sanitary or combined sewer of the city, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this chapter, within ninety (90) days after date of official notice to do so, provided that said public sewer is adjacent to the owner's abutting property line except where some other unusual circumstance exists. (1970 Code, § 8-702)

18-103. Private sewage disposal. The disposal of sewage by means other than the use of the available sanitary sewage system shall be in accordance with local, county, state, and federal law. The disposal of sewage by private disposal systems shall be permissible only in those instances where

service from the available sanitary sewage system is not available. (1970 Code, § 8-703)

18-104. Building sewers and connections. (1) No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the superintendent.

(2) There shall be two (2) classes of building sewer permits: (a) for residential and commercial service, and (b) for service to establishments producing industrial wastes. In either case, the owner or his agent shall make application on a special form furnished by the city. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the superintendent.

(3) All costs and expense incident to the installation and connection 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.

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

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

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

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

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

(9) The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing codes or other

applicable rules and regulations of the city, or the procedures set forth in appropriate specifications of the A.S.T.M. and the W.P.C.F. Manual of Practice No. 9. All such connections shall be made gastight and watertight. Any deviation from the prescribed procedures and materials must be approved by the superintendent before installation.

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

(11) All excavations for building sewer 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. (1970 Code, § 8-704, modified)

18-105. Use of the public sewers. (1) Wastes excluded from discharge into sewerage system. No user shall discharge or allow to be discharged into the sewerage system any of the following materials:

- (a) Storm water and drainage.
- (b) Any liquid or vapor having a temperature higher than one hundred fifty degrees Fahrenheit (150°F), sixty-six degrees Centigrade (66°C).
- (c) Ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tars, plastic, wood, paunch manure, lime slurry, lime residue, chemical residue, cannery wastes, painting residues, bulk solids, or any other solid or viscous substance capable of causing obstruction to the flow in the sewers or interference with the proper operation of the sewerage works and sewage treatment plant.
- (d) Gasoline, benzine, naphtha, fuel oil, mineral oil, and other flammable or explosive liquids, solids, or gases.
- (e) Unshredded or improperly shredded garbage.
- (f) Any wastes having a stabilized pH of less than six (6.0) or more than nine (9.0).
- (g) Any waste which contains more than one hundred (100) milligrams per liter of fat, oil, or grease exclusive of soap.
- (h) Noxious or malodorous gases or substances which singly or by interaction with other wastes may create a public nuisance, hazard to life, or prevent entry into the sewers for maintenance and repair.
- (i) Waste with an excessive color such as dye waste.
- (j) Any waters or wastes containing suspended solids or other contaminants of such character and quality that unusual attention or expense is required to handle such wastes at the wastewater treatment plant.

(k) Any wastewaters not conforming to the requirements in Tables 1 and 2 and Figure 1 which follows.

(l) Dilution of any wastewater discharge for the purpose of satisfying these requirements should be considered a violation of the chapter.

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

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

(o) Materials which exert or cause:

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

(ii) Unusual BOD (above 400 mg/l) and COD (above 800 mg/l), or chlorine requirement in such quantities as to constitute a significant load on the sewage treatment works. A charge may be established by the superintendent for BOD and COD in excess of the previous figures.

(iii) Unusual volume of flow or concentration of wastes constituting "Slugs" and defined herein.

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

(q) Waters or wastes containing nitrogen in excess of 40 mg/l and settleable solids in excess of 20 mg/l. A charge may be established by the superintendent for wastes with excess nitrogen and settleable beyond that of the previous figures.

TABLE 1
 MAXIMUM EFFLUENT STANDARDS FOR DISCHARGE OF WASTE
 INTO THE MUNICIPAL SEWERAGE SYSTEM

Constituent	Daily Average ¹ Maximum Concentration (mg/l)	Instantaneous Maximum Concentration (mg/l)
Compatible Wastes:		
Biochemical Oxygen Demand	225 ^{2*}	300
Chemical Oxygen Demand	400 ^{2*}	450
Settleable Solids (ml/l)	15 ^{2*}	20
Total Suspended Solids	400 ^{*2}	600
Total Dissolved Solids	800	1200
Nitrogen (Total Kjeldahl)	1.5 [*]	2.0
Incompatible Wastes:		
Antimony	5.0	8.0
Arsenic	1.0	1.5
Barium	35.0 [*]	50.0
Boron	55.0 [*]	80.0
Cadmium	1.0 [*]	1.5
Chromium, Total	0.5 [*]	1.0
Cobalt	10.0	15.0
Copper	1.0 [*]	1.5
Cyanide	1.0 [*]	1.5
Fluoride	45.0	70.0
Iron, Total	45.0	70.0
Lead	1.0 [*]	1.5
Magnesium	10.0	15.0
Manganese	1.0	1.5
Mercury	0.1	0.2
Nickel	3.0 [*]	4.5
Phosphorus (Total P)	10.0	15.0
Potassium	10.0	15.0
Selenium	0.1	0.2
Silver	1.0	1.5
Strontium	30.0	50.0
Tin	10.0	15.0
Titanium	3.0	5.0
Zinc	2.0 [*]	3.5
Pesticides	BDL ^{**}	
Phenols	10.0	15.0
Surface Active Agents (as MBAS) Non-Biodegradable	5.0	8.0
Hexane or Ether Soluble Substances	100.0	150.0
Total Oil	50.0	80.0

* Must satisfy conditions established by Table 2 in order for user to discharge levels stipulated in Table 1.

** BDL - Below detectable limit.

¹ Based upon 24-hour flow-proportionate composite samples.

² A variance may be granted if sewerage system does not contain combined sewers.

Note: Discharge limits for Incompatible wastes are based on practical technology.

TABLE 2

MAXIMUM CONCENTRATION IN SEWAGE TREATMENT PLANT
INFLUENT

<u>Constituent</u>	<u>Instantaneous Maximum Concentration (mg/l)</u>	<u>Recommended Maximum Concentration with Safety Factor (mg/l)</u>
Compatible Wastes:		
Biochemical Oxygen Demand	300 ¹	
Chemical Oxygen Demand	450 ¹	
Settleable Solids	20 ¹	
Total Suspended Solids	600 ¹	
Nitrogen (Total Kjeldahl)	2.0	
Incompatible Wastes: ²		
Boron	1.0	0.2
Cadmium	0.02	BDL ³
Chromium (Hexavalent)	2.0	0.4
Chromium (Total)	5.0	1.0
Copper	0.5	0.1
Cyanide	1.0	0.2
Lead	0.1	BDL ³
Nickel	0.5	0.1
Zinc	0.5	0.1

Note: The above maximum concentrations are based on research which has defined tolerance levels of various incompatible wastes relative to sewage treatment plant unit operations. Since there is no safety factor in the above parameter limits, careful judgement must be used to determine at what point corrective action must be taken to prevent incompatible pollutant concentrations from exceeding the maximum allowed in Table 2. It is important to note that cumulative toxicities and synergistic effects due to a mixture of incompatible wastes may have a deleterious effect on sewage treatment plant process at concentrations much less than those shown above. The second column indicates these same values with a safety factor applied. (A factor of 5 in most cases.) This is the recommended approach to listing incompatible pollutant concentrations in sewer use ordinances to protect the treatment plant. Additionally, the parameters listed in Table 2 are derived on the assumption that an effluent limited permit condition exists. However, in certain cases where the effluent standards for the sewage treatment plant are based on a water quality limited condition, then the concentrations stipulated in Table 2 may have to be adjusted downward to satisfy the permit requirements.

¹ Based on design capacity of plant.

² Reference: "Pretreatment of Pollutants Introduced into Publicly Owned Treatment Works"; U.S. E.P.A. Federal Guidelines, October 1973.

³ BDL: Below detectable limit.

(2) If any waters or wastes are discharged, or are proposed to be discharged to the public sewers, and contain the substances or possess the characteristics enumerated in § 18-105(1) and which in the judgment of the superintendent, and/or the Division of Water Quality Control, Tennessee Department of Health, may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the superintendent may:

- (a) Reject the wastes;
- (b) Require pretreatment to an acceptable condition for discharge to the public sewers;
- (c) Require control over the quantities and rates of discharge; and/or
- (d) Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges. Payment may be established by the superintendent.
- (e) Require payment to cover the added cost of handling and treating the toxic or excess waste of an industry. Payment may be established by the superintendent.

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

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

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

(6) All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this chapter shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater," published by the American Public Health Association, and shall be determined at the control manhole provided, or upon suitable samples taken at said control manhole. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb,

and property. (The particular analyses involved will determine whether a twenty-four (24) hour composite of all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from 24-hour composites of all outfalls whereas pH's are determined from periodic grab samples.)

(7) Industrial wastes. Users discharging industrial waste into the sewerage system shall be required to:

(a) Pretreat waste in accordance with local, state, and federal guidelines for all established limits,

(b) Pay surcharge in accordance with § 18-105(2) and,

(c) Provide payment to the city for the extra cost incurred for construction of wastewater facilities in accordance with the guidelines established in MCD - 45 "Federal Guidelines - Industrial Cost Recovery Systems". Under no circumstance shall the concentration in the discharge exceed those limits established in Table 3. Plans for all pretreatment facilities shall be approved by the superintendent prior to construction, and the Tennessee Department of Health. At the time plans are submitted for approval, written maintenance plans shall also be submitted and approved by the superintendent. The facilities shall be allowed to operate only as long as they are maintained in accordance with approved maintenance plans. Treatment facilities shall be required by the city in the following cases:

(i) In cases where a waste may violate the requirements of § 18-105(1), but be alterable by chemical means to be an acceptable waste, the following requirements must be met. Plans shall be submitted for the neutralization of strong acid or alkaline wastes; the plans shall include the necessary instrumentation and controls to assure compliance with the above regulations at all times. Where the volume of acid or alkaline waste is sufficient, in the opinion of the superintendent, to affect quickly the performance of the waste treatment facilities, the user discharging such waste into the sewerage system shall authorize the city to neutralize the waste in emergencies and to charge the offending user for all costs, including chemicals and labor.

(ii) Equalization or holding tanks shall be required ahead of the receiving manhole in the city's sewerage system when deemed necessary by the superintendent to present peak flows that exceed the capacity of the system or that result in operational problems.

TABLE 3

Constituent	Daily Average ^{1, 2, 3} Maximum Discharge Allocated to Industry lbs/day
Biochemical Oxygen Demand	250
Chemical Oxygen Demand	375
Suspended Solids	180
Nitrogen (total Kjeldahl)	10
Daily Average Max. flow/Ind.	.15 MGD
Total flow allocated to Ind.	.40 MGD ³

¹ Based on plant capacity

² Based upon 24 hour flow - proportionate composite sample

³ Industries may individually utilize the capacity of the sewage treatment plant until the maximum discharge (lbs./day) and flow limits (MGD) allocated to the industrial sector are utilized. When this point is reached, no further increase in industrial connections will be permitted. Industries which are presently attached to the system shall not be permitted to increase their discharge or flow rates. This is to prevent encroachment that portion of the plant's capacity allocated for domestic growth.

(iii) All preliminary treatment facilities shall be operated and maintained continuously in satisfactory and effective operation, by the owner at his expense.

(8) Waiver of requirements. There shall be no provision for the granting of variances for discharge of incompatible wastes in greater concentrations than specified in § 18-105, Tables 1, 2 and 3. If a user begins to violate any of the provisions of this section it shall be his responsibility to apply to the superintendent, who can at his discretion, issue a temporary permit along with a compliance schedule for planning and construction of necessary treatment or pretreatment works. Each case will be carefully evaluated with respect to its effect on the municipal treatment plant and the environment prior to issuance of a temporary permit and compliance schedule.

(9) Discontinuance of service for failure to comply. Failure to comply with provisions of this section shall be cause for the discontinuance of sewer or water service to the offending user. The procedure shall be as follows:

A written notice, signed by the superintendent, shall be delivered personally to the person then in charge of the offending use outlining the conditions of the wastes which violates the city ordinances. In the event that the person then in charge of the industry or business will not accept the notice, then it shall be conveyed by registered mail to the person in charge at the address of the business or industry. The person notified shall have twenty-four (24) hours from the time of receipt of the notice, either personally given or received by registered mail, to correct the offending conditions. If correction is not made or request for extension is not received by the superintendent within twenty-four (24) hours, it shall be mandatory that water or sewer service shall be discontinued to the offending user without further notice. If a request for an extension of time is received by the superintendent within twenty-four (24) hours of the above notice and if circumstances are such that the opinion of the superintendent, the best interest of the city would be served in extending the time for the correction of the offending condition, then he may grant an extension of time up to a maximum limit of thirty (30) days. (1970 Code, § 8-705)

18-106. Protection from damage. No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is a part of the sewage works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct. (1970 Code, § 8-706)

18-107. Powers and authority of inspectors. (1) The superintendent and other duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling, and testing in accordance with the provisions of this chapter. The superintendent or his representatives shall have no authority to inquire into any processes, including metallurgical, chemical, oil, refining, ceramic, paper, or other industries, beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterways or facilities for waste treatment.

(2) While performing the necessary work on private properties, subsection (1) above, the superintendent 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 community employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions as required in § 18-105(8).

(3) The superintendent and other duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all private properties through which the city holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling within said easement. All entry and subsequent work, if any, on said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved. (1970 Code, § 8-707)

18-108. Violations. (1) Any person found to be violating any provision of this chapter except § 18-106 shall be served by the city with a written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

(2) Any person who shall continue any violation beyond the time limit provided for in the preceding subsection shall be guilty of a misdemeanor, and on conviction thereof may be fined in the amount not exceeding fifty dollars for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

(3) Any person violating any of the provisions of this chapter shall become liable to the city for any expense, loss, or damage occasioned the city by reason of such violation. (1970 Code, § 8-708)

CHAPTER 2

SEWAGE¹

SECTION

- 18-201. When sanitary sewage disposal facilities are required.
- 18-202. Responsibility for installation and maintenance of facilities.
- 18-203. When a connection to the sanitary sewer is required.
- 18-204. When a septic tank is required.
- 18-205. Use of other than prescribed facilities.

18-201. When sanitary sewage disposal facilities are required. All land situated within the corporate limits and improved with a building or structure wherein people live, are employed, or congregate shall be required to have such sanitary facilities for sewage disposal as are prescribed by this chapter. (1970 Code, § 8-301)

18-202. Responsibility for installation and maintenance of facilities. The owner of all property required by this chapter to have sanitary facilities for sewage disposal shall be responsible for the proper installation of such facilities. The occupant or person having immediate use and control of such property shall be responsible for maintaining the facilities in a sanitary and usable condition unless by contractual arrangement between the parties the owner expressly assumes to retain such responsibility.

The owner, tenant or occupant of each lot or parcel of land required to be connected to the sanitary sewer by § 18-203 of the Rockwood Municipal Code, or any other provision of said code, or any other state or federal regulation of or law, shall each be responsible for the proper installation and maintenance of such facilities unless by contractual arrangements between the parties, only one (1) of the parties expressly assumes to retain such responsibility. The Rockwood Water, Sewer and Natural Gas Department may refuse water service to any such owner, tenant, or occupant for any such property, lot or parcel of land, whether within or outside the city limits of the City of Rockwood, when the private sewer line, or any portion thereof, connecting said property, lot or parcel to the sanitary sewer system has not been properly installed or has been improperly maintained. Additionally, when an owner, tenant or occupant has failed to repair, replace or properly maintain a private sewer line connecting any lot, parcel of land or property to the sanitary sewer system within thirty (30) days after transmittal of a notice to repair, replace or properly maintain, the Rockwood Water, Sewer and Natural Gas Department may discontinue

¹Municipal code reference

Plumbing code: title 12, chapter 2.

water service to such property until the owner, tenant or occupant has complied with such notice. (1970 Code, § 8-302, as replaced by Ord. #12-55, Feb. 2019 *Ch3_6-18-19*)

18-203. When a connection to the sanitary sewer is required. All property required to have sanitary sewage disposal facilities and abutting upon a street or other public way containing a sanitary sewer is required to have such facilities connected to the sanitary sewer. Failure to connect to the sanitary sewer does not relieve responsibility to pay sanitary service usage charges. (1970 Code, § 8-303)

18-204. When a septic tank is required. All property located within the fire limits¹ and required to have sanitary sewage disposal facilities but which does not abut on a sanitary sewer is required to have such sewage disposal facilities connected to a septic tank approved by the health officer. (1970 Code, § 8-304)

18-205. Use of other than prescribed facilities. Where this chapter requires a particular type of sewage disposal facility the use of any other type, or disposal by any other means, is hereby expressly prohibited unless approved by the health officer. The health officer is authorized to approve exceptions to the provisions of this chapter only when the lot size, soil composition, lay of the land, or other unusual circumstances makes the installation and use of the prescribed facilities unfeasible. (1970 Code, § 8-306)

¹See section 7-101 for a description of the fire limits.

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. New installations.
- 18-306. Existing installations.
- 18-307. Inspections.
- 18-308. Right of entry for inspections.
- 18-309. Correction of violations.
- 18-310. Required devices.
- 18-311. Non-potable supplies.
- 18-312. Statement required.
- 18-313. Penalty; discontinuance of water supply.
- 18-314. Provision applicable.

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

- (1) To protect the public potable water system of the Rockwood Water Sewer and Gas from the possibility of contamination or pollution by isolating within the customer's internal distribution system, such contaminants or pollutants that could backflow or back siphon 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. (1970 Code, § 8-401, as replaced by Ord. #12-42, Aug. 2017)

18-302. Definitions. The following words, terms and phrases shall have the meanings ascribed to them in this section, when used in the interpretation and enforcement of this article:

- (1) "Air-gap" shall mean a vertical, physical separation between a water supply and the overflow rim of a non-pressurized receiving vessel. An

¹Municipal code references

Plumbing code: title 12.

Water and sewer system administration: title 18.

Wastewater treatment: title 18.

approved air-gap separation shall be at least twice the inside diameter of the water supply line, but in no case less than six (6") inches. Where a discharge line serves as receiver, the air-gap shall be at least twice the diameter of the discharge line, but not less than 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 dosing 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 system" shall be classified in six (6) different classes in accordance with AWWA Manual M14 - Second Edition 1990. The six (6) classes are as follows:

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

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

(c) Class 3 shall be those with direct connection from public water supply mains, plus one (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).

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

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

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

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

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

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

(15) "Pressure vacuum breaker" shall mean an assembly consisting of a device containing one (1) or two (2) independently operating spring-loaded

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

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

(17) "Reduced pressure 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.

(18) "Manager" shall mean the General Manager of the Rockwood Water Sewer and Gas or his/her duly authorized deputy, agent or representative.

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

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

(b) The customer system shall include those parts of the facilities beyond the termination of the utility system distribution system that are utilized in conveying domestic water to points of use.

(20) "Rockwood Water Sewer and Gas" shall mean the Rockwood Water, Sewer and Gas Department of the City of Rockwood, Tennessee.

(21) "Manual" shall mean the AWWA Manual M14 - Second Edition 1990. (1970 Code, § 8-402, as replaced by Ord. #12-42, Aug. 2017)

18-303. Compliance with Tennessee Code Annotated. Rockwood Water Sewer and Gas 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. Rockwood Water Sewer and Gas shall comply with § 68-221-711 of the Tennessee Code Annotated, 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. (1970 Code, § 8-403, as replaced by Ord. #12-42, Aug. 2017)

18-304. Regulated. (1) No water service connection to any premises shall be installed or maintained by Rockwood Water Sewer and Gas unless the water supply system is protected as required by state laws and this ordinance. Service of water to any premises shall be discontinued by Rockwood Water Sewer and Gas if a backflow prevention device required by this ordinance is not installed, tested, and/or maintained; or if it is found that a backflow prevention device has been removed, bypassed, or if an unprotected cross connection exists on the premises. Service shall not be restored until such conditions or defects are corrected.

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

(3) If, in the judgment of the General Manager or his/her 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 general 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 general manager or his/her 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 Rockwood Water Sewer and Gas or their designee shall conduct inspections and evaluations, and shall require correction of violations in accordance with the provisions of this chapter. (1970 Code, § 8-404, as replaced by Ord. #12-42, Aug. 2017)

18-305. New installations. No installation, alteration, or change shall be made to any backflow prevention device connected to the public water supply for water service, fire protection or any other purpose without first contacting Rockwood Water Sewer and Gas for approval. (1970 Code, § 8-405, as replaced by Ord. #12-42, Aug. 2017)

18-306. 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 Rockwood Water Sewer and Gas. (1970 Code, § 8-406, as replaced by Ord. #12-42, Aug. 2017)

18-307. Inspections. The general manager or his/her 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 Rockwood Water Sewer and Gas in accordance with guidelines acceptable to the Tennessee Department of Environment and Conservation. Rockwood Water Sewer and Gas will have the right to exceed the guidelines if the general manager deems necessary to further protect the public water supply. (1970 Code, § 8-407, as replaced by Ord. #12-42, Aug. 2017)

18-308. Right of entry for inspections. The general manager or his/her authorized representative shall have the right to enter, at any reasonable time, any property served by a connection to Rockwood Water Sewer and Gas 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. (1970 Code, § 8-408, as replaced by Ord. #12-42, Aug. 2017)

18-309. Correction of violations. (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 thorough investigation of the existing conditions and an appraisal of the time required to complete the work, the general manager or his/her representative shall assign an appropriate amount of time, but in no case, shall the time for corrective measures exceed ninety (90) days, unless the manager determines that due to unusual circumstances additional time should be granted.

(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, Rockwood Water Sewer and Gas 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 onsite 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 general 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 Tennessee Code Annotated, § 68-221-711, within the time limits established by the general manager or his/her representative, shall be grounds for denial of water service. If proper protection has not been provided after a reasonable time, the general manager shall give the customer legal notification that water service is to be discontinued, and shall physically separate the public water system from the customers 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 general manager, warrants disconnection prior to a due process hearing. (1970 Code, § 8-409, as replaced by Ord. #12-42, Aug. 2017)

18-310. 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 Rockwood Water Sewer and Gas 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 Rockwood Water Sewer and Gas, as to manufacture, model, size and application. The method of installation of backflow prevention devices shall be approved by Rockwood Water Sewer and Gas 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. 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 (thirty (30) 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 (unless additional time is granted by the general manager) 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) Application 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 Rockwood Water Sewer and Gas as needing protection.

(a) Class 1, Class 2 and Class 3 fire protection systems shall require a reduced pressure backflow prevention device shall be required where:

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

(ii) Premises have unusually complex piping systems;

(iii) 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 bib vacuum breaker be installed on the faucet used for filling.

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

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

(a) All required devices shall be installed in accordance with the provisions of this chapter, by a person approved by Rockwood Water Sewer and Gas 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 bib vacuum breakers). All fittings shall be of brass construction, unless otherwise approved by Rockwood Water Sewer and Gas, 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 shall 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/back-siphonage 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 Rockwood Water Sewer and Gas. 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 plus forty degrees Fahrenheit (+40° F) with an outside temperature of minus thirty degrees Fahrenheit (-30° F) and a wind velocity of fifteen (15) miles per hour.

(o) Where the use of water is critical to the continuance of normal operations or the protection of life, property or equipment, duplicate backflow prevention devices shall be provided to avoid the necessity of discontinuing water service to test or repair the protective device. Where it is found that only one (1) device has been installed and the continuance of service is critical, Rockwood Water Sewer and Gas 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, Rockwood Water Sewer and Gas may require the installation of a duplicate device.

(p) Rockwood Water Sewer and Gas 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 Rockwood Water Sewer and Gas. Expense of such repairs shall be borne by the owner for 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 alternation 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 Rockwood Water Sewer and Gas.

(6) **Testing of devices.** 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 as required by Rockwood Water Sewer and Gas. A record of this test will be on file with Rockwood Water Sewer and Gas and a copy of this report will be supplied to the customer. Water service shall not be disrupted to test a device without the knowledge of the occupant of the premises. All charges for testing will be billed to the customer. (as replaced by Ord. #12-42, Aug. 2017)

18-311. Non-potable supplies. The potable water supply made available to a premise 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 (OSHA) Occupational Safety and Health Act guidelines, shall be required in locations where in the judgment of Rockwood Water Sewer and Gas, such coding is necessary to identify and protect the potable water supply. (as added by Ord. #12-42, Aug. 2017)

18-312. 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 Rockwood Water Sewer and Gas 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. #12-42, Aug. 2017)

18-313. 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. #12-42, Aug. 2017)

18-314. Provision applicable. The requirements contained in this chapter shall apply to all premises served by Rockwood Water Sewer and Gas and are hereby made part of the conditions required to be met for Rockwood Water Sewer and Gas 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 Rockwood Water Sewer and Gas is entitled to a due process hearing upon timely request. (as added by Ord. #12-42, Aug. 2017)

CHAPTER 4

WATER, SEWERS, AND GAS¹

SECTION

- 18-401. Fluoridation of water supply.
- 18-402. Initial deposits and charges for water and sewer service.
- 18-403. Water rates and bills.
- 18-404. Water rate relief for retired persons.
- 18-405. Sewer service charges and bills.
- 18-406. Discontinuance of service to delinquent users.
- 18-407. Uniform application of rates.
- 18-408. Use of water, sewers, and fire hydrants by the city.
- 18-409. Special account for water, sewer, and gas revenues.
- 18-410. Gas deposits.
- 18-411. Installation and ownership of, and access to gas facilities.
- 18-412. Gas extension policy.
- 18-413. Gas connection charges.
- 18-414. Gas rates.
- 18-415. Authority to negotiate non-interruptible gas service contracts.
- 18-416. Interruptions in gas service.
- 18-417. Discontinuance of gas service.
- 18-418. Payment for services rendered by the city.
- 18-419. Building permit or certificate of occupancy required before service is supplied.
- 18-420. Sewer rates for low volume commercial water customers.

18-401. Fluoridation of water supply. The water department is hereby authorized and instructed to make plans for the fluoridation of the city water supply; to submit such plans to the department of health of the state for approval; and, upon approval shall add such fluorides to the water supply in accord with such approval as will adequately provide for the fluoridation of said water supply.

The cost of such fluoridation will be borne by the revenue of the water department. (1970 Code, § 13-202)

18-402. Initial deposits and charges for water and sewer service. Each user of water from the municipal water works system and each user of the municipal sewer system shall deposit with the secretary-treasurer of the board

¹Municipal code reference

Board of waterworks, sewerage, and natural gas commissioners: title 2, chapter 4.

of water works, sewerage, and natural gas commissioners at the time his application for water and sewage service is approved, a sum equivalent to his estimated monthly water and sewage bill. The deposit shall be retained by the city as surety for the payment of water and sewage bills, and may be applied to any delinquent bills, but shall be returned to the user at such time as the user declines further service, provided all charges for service have been paid. In the event the user is applying for a new service connection he shall pay in addition to the deposit an installation charge as established by the board of water works, sewerage, and natural gas commissioners. (1970 Code, § 13-203, modified)

18-403. Water rates and bills. The sale of water shall be conducted on a meter basis and each and every user of services within the corporate limits of the City of Rockwood shall be billed at the following rates:

<u>Inside City</u>	<u>Outside City</u>	<u>South Roane County</u>
1 to 200 CF (min) \$13.07	\$22.85	\$29.77
201 to 1000 (per 100 CF) \$3.85	\$6.73	\$7.18
over 1000 cubic feet \$1.59 per 100 cubic feet	over 1000 cubic feet \$2.77 per 100 cubic feet	over 1000 cubic feet \$3.96 per 100 cubic feet

Water rates for large commercial users may be at such amount as is fair and equitable and as agreed upon by the parties under written contract.

All charges are subject to a penalty of ten percent (10%) of the amount of charges when they are not paid by the specified due date for the particular cycle.

These rates are to take effect in the form of three (3) increases from the rate established in ordinance 955. Each increase will be one-third (1/3) of the total rate increase. The first increase is to take effect September 1, 1999. The second increase is to take effect November 1, 1999. The third and final increase is to take effect January 1, 2000. (1970 Code, § 13-204, modified, as amended by Ord. #1031, Aug. 1999, and Ord. #12-27, Feb. 2016)

18-404. Water rate relief for retired persons. Any individual or family who is retired on a total income that is 125 percent or less of current federal poverty guidelines in effect at time of application shall be eligible to apply for a water rate schedule that shall be the water rate schedule in effect less five per cent (5%).

Total income shall be considered the sum total of Social Security, other retirement pay, investments and part-time employment. Benefits from a federal or state program shall not be considered income if the guidelines for that program prohibit the use of such benefits in determining eligibility. (1970 Code, § 13-204.1)

18-405. Sewer service charges and bills. For the purpose of constructing, maintaining and operating a proper sewage disposal system in compliance with requirements of TCA, §§ 7-35-101 -- 7-35-432, there shall be imposed a charge in the amount of one hundred sixty percent (160%) of monthly water bills to each user of said sewage system. The minimum charge shall be established by resolution by the city council. (1970 Code, § 13-205, modified, as amended by Ord. #12-1145, July 2011, and Ord. #11-91, Aug. 2014)

18-406. Discontinuance of service to delinquent users. Regulations establishing delinquent dates and governing the collection of delinquent payments shall be established by the board of water works, sewerage, and natural gas commissioners.

18-407. Uniform application of rates. No free service shall be rendered to any user of water or sewers, and all users shall be billed in accordance with the above schedule of rates. (1970 Code, § 13-207)

18-408. Use of water, sewers, and fire hydrants by the city. The City of Rockwood and all other public users of water and sewage shall be billed for water and sewage service in accordance with the rates established by resolution by the city council. In addition, the city council shall by resolution establish and pay to the water system a monthly fire hydrant rental charge for all fire hydrants now or hereafter installed within the city limits. (1970 Code, § 13-208, modified)

18-409. Special account for water, sewer, and gas revenues. All funds collected from the sale of water, sewer services, and natural gas shall be handled, deposited, and used in accordance with the terms of the bond ordinance heretofore passed providing for the issuance and sale of a \$1,713,000.00 waterworks, sewer, and natural gas refunding bonds, series 1965. (1970 Code, § 13-209)

18-410. Gas deposits. Each gas customer shall deposit with the city such reasonable sums of money as may be required by the board of water works, sewerage, and natural gas commissioners as continuing security for the performance of the obligations contracted for by the customer. (1970 Code, § 13-211, modified)

18-411. Installation and ownership of, and access to gas facilities. The city shall install and own all gas service mains, meters, and service lines on the street side of the meter. The customer shall own and install in accordance with the requirements of the city's gas code all gas service lines on the customer's side of the meter. Authorized representatives of the city shall have

access at all reasonable times to all gas meters and lines, etc., which may be located on customer's premises. (1970 Code, § 13-212)

18-412. Gas extension policy. An extension of gas service mains will be made to any person with the city bearing all the costs thereof provided the board of water, sewerage, and natural gas commissioners is satisfied that the investment for such extension will earn a fair and adequate return. However, if the board decides that an extension will not show a fair and adequate return, the city may require the applicant for such service to pay all or a part of the costs of such extension. When the customer makes an extension he shall be required to convey all his rights, title, and interest in the same to the city before gas shall be supplied thereto. However, thereafter, such extension shall be maintained by the city without additional costs to the customer. (1970 Code, § 13-213)

18-413. Gas connection charges. Each applicant for gas service shall be required to pay a connection fee for the installation of the line. The charges shall be only from the property line to the meter. (1970 Code, § 13-214, modified)

18-414. Gas rates. All gas furnished by the city shall be supplied at rates established by resolution by the city council.

No free service shall be rendered to any user of natural gas, and all users shall be billed in accordance with the rates established by the city council. (1970 Code, § 13-215, modified)

18-415. Authority to negotiate non-interruptible gas service contracts. The board of waterworks, sewerage, and gas commissioners shall have the authority to negotiate and contract, with any industrial firm or corporation, agreements by the city to furnish natural gas to the industrial firm or corporation on a non-interruptible basis at reasonable rates agreed upon by the board of waterworks, sewerage, and gas commissioners and the industrial firm or corporation; provided that any agreement to supply natural gas on a non-interruptible basis shall not in any way materially impair or decrease the supply of natural gas to customers receiving natural gas on a basis other than non-interruptible. (1970 Code, § 13-216, modified)

18-416. Interruptions in gas service. The city will endeavor to furnish continuous gas service, and to maintain reasonably constant pressure, but the city cannot and does not guarantee to the consumer any fixed pressure or continuous service. The city shall not be liable for any damages for any interruption or disturbance of service whatsoever.

In connection with the operation, maintenance, repair and extension of the city's gas system, the gas 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 held liable for any damages from such interruption of service or for damages from the resumption of service without notice after any such interruption. (1970 Code, § 13-218)

18-417. Discontinuance of gas service. The board of water works, sewerage, and natural gas commissioners shall have the right to discontinue gas service to any customer who is in default in the payment of any obligation due the city for gas service. (1970 Code, § 13-219, modified)

18-418. Payment for services rendered by the city. The water, sewer and natural gas department shall pay the City of Rockwood for services rendered by the city \$50,000 per year, to be divided into twelve (12) equal payments. (1970 Code, § 13-221)

18-419. Building permit or certificate of occupancy required before service is supplied. Prior to the provision of electric, water, gas, or sewer utility services to a site the service provider shall require the applicant to provide a valid building permit or certificate of occupancy. A certificate of occupancy may be issued without inspection of an existing structure, residential or business, provided the building inspector determines that the property complies with zoning requirements and that an inspection is not required under the provisions of title 13, chapter 2 and/or other municipal ordinances and codes. (1970 Code, § 13-222)

18-420. Sewer rates for low volume commercial water customers.

(1) A commercial customer using no more than three thousand (3,000) cubic feet of water at said customer's commercial service location during a monthly billing cycle and having no restroom facilities, shower facilities, bathing facilities, washing facilities or sinks connected to the sewer system at said service location, shall be charged during said monthly billing cycle, a sewer fee of twenty dollars (\$20.00).

(2) To be eligible for this sewer fee, the customer must first apply and then allow a representative from the Rockwood Water, Sewer and Gas Department to inspect the commercial location where water service is provided to verify that the location has no restroom facilities, shower facilities, bathing facilities, washing facilities or sinks connected to the sewer. Said Customer must also allow a representative from the Rockwood Water, Sewer and Gas Department to inspect said location on an annual basis to confirm that said location has no restroom facilities, shower facilities bathing facilities, washing facilities or sinks connected to the sewer.

(3) This rate shall apply only during monthly billing cycles when the service location uses no more than three thousand (3,000) cubic feet of water. For any monthly billing cycle when the location receives more than three

thousand (3,000) cubic feet of water, the regular sewer rate charged to all other commercial customers shall apply. (as added by Ord. #12-14, Sept. 2015)