TITLE 18

WATER AND SEWERS

CHAPTER

1. SEWER PROVISIONS.

CHAPTER 1

SEWER PROVISIONS

SECTION

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18-101. <u>**Definitions**</u>. Unless the context specifically indicates otherwise, the meaning of terms used in this chapter shall be as follows.

(1) "BOD" (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the bio-chemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty degrees Celsius (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 feet (5') (one and one-half (1.5) meters) outside the inner face of the building wall.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(22) "Watercourse" shall mean a channel in which a flow of water occurs, either continuously or intermittently. (Ord. #04-04, Nov. 2004)

18-102. <u>Use of public sewers required</u>. (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 Town of Tracy City, or in any area under the jurisdiction of said town, any human or animal excrement, garbage, or other objectionable waste.

(2) It shall be unlawful to discharge to any natural outlet within the Town of Tracy City, or in any area under the jurisdiction of said town, 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 town and abutting on any street, alley, or right-of-way in which there is now located or may in the future by located a public sanitary or combined sewer of the town, 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 at the property line. (Ord. #04-04, Nov. 2004, modified)

18-103. <u>**Private sewage disposal**</u>. The disposal of sewage by means other than the use of the available sanitary sewage system shall be in accordance with local county and state 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. (Ord. #04-04, Nov. 2004)

18-104. <u>Building sewers and connections</u>. (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 town.

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 town 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 building 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 code or other applicable rules and regulations of the town. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the *A.S.T.M.* and *W.P.C.F. Manual of Practice No. 9* shall apply.

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

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

(9) The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the town, 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 town. (Ord. #04-04, Nov. 2004)

18-105. <u>Use of the public sewers</u>. (1) No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer.

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

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

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

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

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

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

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

(a) Any liquid or vapor having a temperature higher than one hundred fifty degrees Fahrenheit (150°F) or sixty-five degrees Celsius (65°C).

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

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

of three-fourths (3/4) horsepower (0.16 hp metric) or greater shall be subject to the review and approval of the superintendent.

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

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

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

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

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

(i) Materials which exert or cause:

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

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

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

(4) Unusual volume of flow or concentration of wastes constituting "slugs" and defined herein.

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

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

(5) If any waters or wastes are discharged, or are proposed to be discharged to the public sewers, which waters contain the substances or possess

the characteristics enumerated in subsection (4) above, and which in the judgment of the superintendent, and/or the Division of Sanitary Engineering, Tennessee Department of Environment and Conservation, may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the superintendent may:

(a) Reject the wastes;

(b) Require pretreatment to an acceptable condition for discharge to the public sewers;

(c) Require control over the quantities and rates of discharge; and/or

(d) Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges under the provisions of subsection (10) below.

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

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

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

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

(9) All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this chapter shall be determined in accordance with the latest edition of *Standard Methods for the Examination of Water and Wastewater*, published by the American Public Health Association and shall be determined at the control manhole provided, or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to

be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards of life, limb, and property. (The particular analyses involved will determine whether a twenty-four (24) hour composite of all outfalls of a premises is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from twenty-four (24) hour composites of all outfalls whereas pHs are determined from periodic grab samples.)

(10) No statement contained in this section shall be construed as preventing any special agreement or arrangement between the town and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the town for treatment, subject to payment therefor, by the industrial concern. (Ord. #04-04, Nov. 2004)

18-106. <u>Protection from damage</u>. 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. (Ord. #04-04, Nov. 2004)

18-107. <u>Powers and authority of inspectors</u>. The superintendent and other duly authorized employees of the town 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. (Ord. #04-04, Nov. 2004)