## TITLE 9 CHAPTER 3

#### **SEWER REGULATIONS**

#### SECTION:

9-3-1: Definitions

9-3-2: Use of Public Sewers Required; Prohibited Discharges

9-3-3: Building Sewers and Connections9-3-4: Use of Public Sewers; Restrictions

9-3-5: Industrial Cost Recovery9-3-6: Protection from Damage

9-3-7: Powers and Authority of Inspectors

**9-3-1: DEFINITIONS:** Unless the context specifically indicates otherwise, the meaning of terms used in this Chapter shall be as follows:

BOD (Denoting Biochemical Oxygen Demand)

The quantity of oxygen utilized the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty degrees (20°) C., expressed in milligrams per liter.

BUILDING DRAIN That part of the lowest horizontal piping of a building system which receives

the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewers, beginning five feet (5')

outside the inner face of the building walls.

BUILDING SEWER The extension from the building drain to the public sewer or other place of

disposal.

COMBINED SEWER A sewer receiving both surface runoff and sewage.

GARBAGE Solid wastes from the domestic and commercial preparation, cooking and

dispensing of food, and from the handling, storage and sale of produce.

INDUSTRIAL WASTES The liquid wastes from any nongovernmental user of publicly owned

treatment works identified in the Standard Industrial Classification Manual, 1972, Office of Management and Budget, as amended and supplemented

under the following divisions:

Division A - Agriculture, Forestry and Fishing

Division B - Mining

Division C - Manufacturing

Division E - Transportation, Communications, Electric, Gas, and Sanitary

Services

A user in the Divisions listed may be excluded if it is determined that it will introduce primarily segregated domestic wastes or wastes from sanitary

conveniences.

NATURAL OUTLET Any outlet into a watercourse, pond, ditch, lake or other body of surface or

ground water.

PERSON Any individual, firm, company, association, society, corporation or group.

pH The logarithm of the reciprocal of the weight of hydrogen ions in grams per

liter os solution.

PROPERLY SHREDDED The wastes from the preparation, cooking and dispensing of

GARBAGE food that has 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") in dimension.

PUBLIC SEWER A sewer in which all owners of abutting properties have equal rights, and is

controlled by public authority.

SANITARY SEWER A sewer which carries sewage and to which storm surface and ground

waters are not intentionally admitted.

SEWAGE 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.

SEWAGE TREATMENT

**PLANT** 

Any arrangement of devices and structures used for treating

sewage.

SEWAGE WORKS All facilities for collecting, pumping, treating and disposing of sewage.

SEWER A pipe or conduit for carrying sewage.

SHALL, MAY Shall is mandatory; may is permissive.

SLUG 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 of flows during normal

operation.

STEP SYSTEM The septic tank effluent pump system that is owned, operated and

maintained by the City. It is usually installed on private property under an easement to the City. It is required as a condition for service to pretreat sewage and pressurize septic tank effluent for delivery to a street sewer.

STORM DRAIN (sometimes termed STORM

SEWER)

A sewer which carries storm and surface waters and drainage, but excludes sewage and industrial wastes, other than un-polluted cooling

water.

SUPERINTENDENT The Superintendent of Public Works of the City or his authorized deputy,

agent or representative.

SUSPENDED SOLIDS Solids that either float on the surface of, or are in suspension in water,

sewage or other liquids, and which are removable by laboratory filtering.

WATERCOURSE A channel in which a flow of water occurs, either continuously or

intermittently.

## 9-3-2: USE OF PUBLIC SEWERS REQUIRED; PROHIBITED DISCHARGES:

A. 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 thirty (30) days after date of official notice to do so; provided, that said public sewer is within two hundred feet (200') of the property line.

B. 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, or in any area under the jurisdiction of the City, any human or animal excrement, garbage or other objectionable waste.

- C. It shall be unlawful to discharge to any natural outlet within the City, or in any area under the jurisdiction of the City, any sewage or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this Chapter.
- D. 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 within the City, except those facilities owned and operated by the City.

## 9-3-3: BUILDING SEWERS AND CONNECTIONS:

A. Connection Permit Required, Inspection: 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.

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.

- B. Classes; Application: There shall be three (3) classes of building sewer permits:
  - 1. For residential and commercial conventional services; and
  - 2. For STEP Systems; and
  - 3. For service to establishments producing industrial wastes.

In any 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. A permit and inspection fee for building sewer permit shall be paid to the City at the time the application is filed. The fee schedule for connection shall be set by resolution.

## C. Sewer Service Charges:

- 1. There is hereby established a sewer charge to be applied to all buildings, structures and facilities located on premises which are adjacent to, or within two hundred feet (200') of any City sanitary sewer, whether connected thereto or not. Sewer service charges shall be set by resolution.
- 2. A sewer rate adjustment for STEP users may be required to compensate the City for any additional costs, such as periodic tank pumping, pump and component replacement. Such fee shall be set by resolution.
- D. Costs Borne by Owner: 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.
- E. Separate Connections: A separate and independent building sewer shall be provided for every building; except where one building stands at the rear of another or 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.
- F. Old Building Sewers: 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.
- G. Construction Specifications: The size, slope, alignment, materials or 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 <sup>1</sup> or other applicable rules and regulations of the City. In the absence of Code provisions or in amplification of the A.S.T.M.

and W.P.C.F., Manual of Practice No. 9 shall apply.

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 prescribed procedures and materials must be approved prior to installation.

- H. 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 discharged to the building sewer.
- I. Storm Sewer Connection Prohibited: No person shall make connection of roof downspouts, exterior foundation drains, areaway drains or other sources of surface runoff or ground water to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.
- J. Excavation Barricaded: 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.
- K. Special requirements pertaining to STEP Systems:
  - An easement to construct, operate and maintain the system will be required to be given to the City prior to installation. It shall be the responsibility of the property owner to keep clean and maintain the building sewer from the building to the connection with the public sewer.
  - A separate and independent building sewer shall be provided for and from every building to a STEP System. Where required, two or more buildings on one (1) tax lot under one (1) ownership can share a single STEP System that is approved by the City and appropriately sized. Each separate and independent building shall pay the applicable connection fee and monthly charges.
  - 3. The materials, excavation and installation of the STEP System shall be in accordance with the plans and specifications of the City. Individual electrical and pump needs will have to be determined for each service connection.
  - 4. The City shall own the pressure system and the STEP unit, consisting of a septic tank, pumping system, electrical conduit and cable to the home control panel, service box, and related appurtenances. The City will be responsible to pump the septic tank when required.
  - 5. The property owner shall be responsible to provide 110 volt electrical power on a 20 amp circuit to control panel, and bear cost of electricity, and own and be responsible for sewer line from home to septic tank.
  - 6. Installation of the STEP unit shall be by property owner, under City inspection, at time of home construction, and shall be as specified by City to ensure maintenance and operation compatibility\*s.

# 9-3-4: USE OF PUBLIC SEWERS; RESTRICTIONS:

- A. No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer.
- B. Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the Superintendent. Industrial cooling water or unpolluted process waters may be discharged, on approval of the Superintendent, to a storm sewer, combined sewer or natural outlet.

- C. No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewers:
  - 1. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas.
  - 2. 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 sewage treatment plant, including but not limited to cyanides in excess of two (2) mg/l or CN in the wastes as discharged to the public sewer.
  - 3. Any waters or wastes having a pH lower than five and five-tenths (5.5) or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works.
  - 4. 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, mild containers, etc. either whole or ground by garbage grinders.
- D. 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 as to the acceptability of these wastes, the Superintendent will give consideration to such factors as to quantities of subject wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, and other pertinent factors. The substances prohibited are:
  - 1. Any liquid or vapor having a temperature higher than one hundred fifty degrees (150°) F. (65°C).
  - 2. Any water or waste containing fats, gas, grease or oils, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty two degrees (32°) F. and one hundred fifty degrees (150°) F. (0 and 65° C.).
  - 3. 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 (0.76 hp metric) or greater shall be subject to the review and approval of the Superintendent.
  - 4. Any waters or wastes containing strong acid iron pickling wastes or concentrated plating solutions, whether neutralized or not.
  - 5. Any waters or wastes containing iron, chromium, copper, zinc, 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 for such materials.
  - 6. 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 of such discharge to the receiving waters.
  - 7. 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.

- 8. Any waters or wastes having pH in excess of nine and five-tenths (9.5)
- 9. Materials which exert or cause:
  - a. Unusual concentrations of inert suspended solids (such as, but not limited to, Fuller's earth, lime slurries and lime residues) or of dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate).
  - b. Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions).
  - c. Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works.
  - d. Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein.
- 10. Waters or wastes containing substances which are not amenable to the 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.
- E. 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 D of this Section, and which, in the judgment of the Superintendent, may have 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:
  - 1. Reject the wastes,
  - 2. Require pretreatment to an acceptable condition for discharge to the public sewers,
  - 3 Require control over the quantities and rates of discharge, and/or
  - 4. 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 J of this Section.

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 subject to the requirements of all applicable codes, ordinances and laws.

- F. 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 located as to be readily and easily accessible for cleaning and inspection.
- G. 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.
- H. 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 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.
- I. All measurements, tests and analysis 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 hazard to life, limb and property. (The particular analysis involved will determine whether a 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 analysis are obtained from 24-hour composites of all outfalls whereas pH's are determined from periodic grab samples).

J. No statement contained in this Section shall be construed as preventing any special agreement or arrangement between the City and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the City for treatment, subject to payment therefor, by the industrial concern.

### 9-3-5: INDUSTRIAL COST RECOVERY:

- A. All industrial users shall be required to pay that portion of the Federal assistance grant under PL 92-500 allocable to the treatment of waste from such users.
- B. The system for industrial cost recovery shall be implemented and maintained according to the following requirements:
  - 1. Each year during industrial cost recovery period, each industrial user of the treatment works shall pay its share of the total Federal grant amount divided by the recovery period.
  - 2. The industrial cost recovery period shall be equal to twenty (20) years or the useful life of the treatment works, whichever is less.
  - 3. Payments shall be made by industrial users no less often than annually. The first payment by an industrial user shall be made not later than one year after such user begins use of the treatment works.
  - 4. An industrial user's share shall be based on all factors which significantly influence the cost of the treatment works, such as strength, volume and flow rate characteristics. As a minimum, an industry's share shall be based on its flow versus treatment works capacity except in unusual cases.
  - 5. An industrial user's share shall be adjusted when there is a substantial change in the strength, volume or flow rate characteristics of the user's wastes, or if there is an expansion or upgrading of the treatment works.
  - 6. An industrial user's share shall not include any portion of the Federal grant amount allocable to unused or unreserved capacity.
  - 7. An industrial user's share shall include any firm commitment to the City of increased use by such a user.
  - 8. An industrial user's share shall not include an interest component.
- C. This requirement applies only to those features of waste water treatment and transportation facilities which have been constructed with Federal assistance administered by the U.S. Environmental Protection Agency under PL 92-500.
- **9-3-6: 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 provisions shall be subject to immediate arrest under charge of disorderly conduct.

### 9-3-7: POWERS AND AUTHORITY OF INSPECTORS:

- A. 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.
- B. 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, repair and maintenance of any portion of the sewage works lying 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. (Ord. 571, 111-23-76) (Ord 8, Series 1989)

8