# **TITLE 10**

# **UTILITIES**

# **Chapter:**

10.04	Sewer Regulations
80.01	Sewer Improvement Distric
10.12	Sewer Rates
10.16	Water Rates
0.20	<b>Cross-Connection Program</b>
0.24	Wall Hand Protection

# **CHAPTER 10.04**

# **SEWER REGULATIONS**

### Sections:

10.04.01	Definitions
10.04.02	Use of public sewers required
10.04.03	Private sewage disposal system
10.04.04	Building sewers and connections
10.04.05	Use of public sewers
10.04.06	Protection from damage
10.04.07	Power and authority of Superintendent
10.04.08	Penalty for violation
10.04.09	Joint sewer contract

<u>10.04.01 Definitions</u> Unless the context specifically indicates otherwise, the meaning of the terms used shall be as follows:

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

**Building** shall mean residential and commercial structures, which enclose a source of wastewater.

**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.

**Building sewer** shall mean the extension from the building drain to the public sewer or other place of disposal also called house connection.

**Easement** shall mean an acquired legal right for the specific use of land owned by others.

**Floatable oil** is oil, fat, or grease in a physical state such that it will separate by gravity from wastewater by treatment in an approved pretreatment facility. A wastewater shall be considered free of floatable fat if it is properly treated and the wastewater does not interfere otherwise with the collection system.

**Garbage** shall mean the animal and vegetable resulting from the handling, preparation, cooking, and serving of foods.

**Industrial wastes** shall mean the wastewater from industrial processes, trade or business as distinct from domestic or sanitary wastes.

**Natural outlet** shall mean any outlet, including storm sewers and combined sewer overflows, that discharges into a watercourse, pond, ditch, lake or other body of surface or ground water.

May is permissive.

**pH** shall mean the logarithm of the reciprocal of the weight of hydrogen ion concentration. The concentration is the weight of hydrogen ions, in grams, per liter of solution. Neutral water, for example, has pH value of 7 and a hydrogen ion concentration of 10<sup>7</sup>.

**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 in any dimension.

**Public sewer** shall mean a common sewer controlled by a governmental agency or a public utility.

**Sanitary sewer** shall mean a sewer which carries liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions together with minor quantities of ground, storm, and surface waters that are not admitted intentionally.

**Sewage** is the spent water of a community. The preferred term is wastewater.

**Sewer** shall mean a pipe or conduit that carries wastewater.

**Shall** is mandatory.

**Slug** shall mean any discharge of waste or wastewater which in concentration of any given constituent or in quantity of flow exceeds for fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration or flow during normal operation.

**Storm-drain** (sometimes termed storm sewer) shall mean a drain or sewer for conveying water, groundwater, subsurface water, or unpolluted water from any source.

**Superintendent** shall mean the superintendent of the wastewater facilities of the city of Lake City, or his authorized deputy, agent or representative.

**Suspended solids** shall mean total suspended matter that either floats on the surface of, or is in suspension in water, wastewater, or other liquids, and that is removable by laboratory filtering as prescribed in "Standard Methods for the Examination of Water and Wastewater" and referred to an non-filterable residue.

**Unpolluted water** is water of quality equal to or better than the effluent criteria in effect or water that would not cause violation of receiving water quality standards and would not be benefited by discharge to the sanitary sewers and wastewater treatment facilities provided.

**Wastewater** shall mean the spent water of a community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants and institutions.

**Wastewater facilities** shall mean the structures, equipment, and processes required to collect, carry away, and treat domestic and industrial wastes and dispose of the effluent.

**Wastewater treatment works** shall mean an arrangement of devices and structures for treating wastewater, industrial wastes, and sludge. Sometimes used as synonymous with "waste treatment plant" or "wastewater treatment plant" or "water pollution control plant."

**Watercourse** shall mean a natural or artificial channel for the passage of water either continuously or intermittently. (Ord. No. 93-145, Art. 1)

### 10.04.02 Use of public sewers required

A. It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within the city of Lake City or in any area under the jurisdiction of the city, any human or animal excrement, garbage or other objectionable waste.

- B. It shall be unlawful to discharge to any natural outlet within the city of Lake City or in any area under the jurisdiction of the city, any wastewater or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this ordinance. The issuance of a valid national pollutant discharge elimination system permit covering such discharges into a natural outlet shall be considered as meeting all requirements of this section.
- C. 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 wastewater.
- D. The owner(s) 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 sewer of the city, is hereby required at the expense of the owner(s) to install suitable toilet facilities therein, and to connect such facilities either through a septic tank or 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 the public sewer is within three hundred (300) feet of the building. (Ord. No. 93-145, Art. II.)

# 10.04.03 Private sewage disposal system

- A. Where a public sanitary sewer is not available under the provisions of 10.04.02, the building sewer shall be connected to a private wastewater disposal system complying with the provisions of this article.
- B. Before commencement of construction of a private wastewater disposal system the owner(s) shall first obtain a written permit signed by the superintendent. The application for such permit shall be made on a form furnished by the city, which the applicant shall supplement by any plans, specifications, and construction permits approved by the Arkansas Department of Health. The minimum lot area for a single-family residence shall be in accordance with current Arkansas Department of Health regulations. A permit and inspection fee of Thirty-Five Dollars (\$35.00) shall be paid to the city at the time the application is filed.
- C. A permit for a private wastewater disposal system shall not become effective until the installation is competed to the satisfaction of the superintendent. The superintendent shall be allowed to inspect the work at any stage of construction, and in any event, the applicant for the permit shall notify the superintendent when the work is ready for final inspection, and before any underground portions are covered. The inspection shall be made within 48 hours of the receipt of notice by the superintendent.

- D. The type, capacities, location, and layout of a private wastewater disposal system shall comply with all recommendations approved by the Arkansas Department of Health. No septic tank shall be permitted to discharge to any natural outlet.
- E. At such time as a public sewer becomes available to a property served by a private wastewater disposal system, as provided in 10.04.02, a direct connection from the building or the septic tank shall be made to the public sewer within thirty (30) days in compliance with this ordinance. The requirements of this section shall not apply to owners discharging such sewage under the provisions of a valid national pollution discharge elimination system permit.
- F. The owner(s) shall operate and maintain the private wastewater disposal facilities in a sanitary manner at all times, at no expense to the city.
- G. No statement contained in this chapter shall be construed to interfere with any additional requirements that may be imposed by the County Sanitarian. (Ord. No. 93-145, Art. III.)

### 10.04.04 Building sewers and connections

- A. No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereon without first obtaining a written permit from the Superintendent.
  - B. 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(s) 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 of Fifty Dollars (\$50.00) for a residential or commercial permit and Fifty Dollars (\$50.00) for industrial building permits shall be paid to the city at the time the application is filed.
  - C. All costs and expenses incidental to the installation and connection of the building sewer shall be borne by the owner(s). The owner(s) shall indemnify the city from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.
  - D. A separate and independent building sewer shall be provided for every building except where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an

- adjoining alley, courtyard, or driveway. The front building sewer may be extended to the rear building and the whole considered as one building sewer.
- E. Old building sewers may be used in connection with new buildings only when they are found, on examination and tested by the Superintendent, to meet all requirements of this ordinance.
- F. All new sewers and related construction work must be properly designed and constructed. For all collectors, interceptors, building sewers, and septic tanks the size, slope, alignment, material of construction, and the methods used for excavating, placing, jointing, testing, and backfilling shall all conform to the requirements of the Building and Plumbing Code or other applicable rules and regulations of the city and the state of Arkansas. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the American Society of Civil Engineers (ASCE) and Water Environment Federation (WEF) Manual of Practice No. 9 shall apply.
- G. 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.
- H. No person(s) shall make connection of roof downspouts, exterior foundation drains, area 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.
- I. All connection into the public sewer shall conform to the requirements of the Building and Plumbing Code or other applicable rules and regulations of the city, or the procedures set forth in appropriate specifications of the ASCE and the WEF Manual of Practice No. 9. All such connections shall be made gas-tight and watertight and shall be verified by proper testing.
- J. The applicant for the building sewer permit shall notify the Superintendent when the building sewer (and septic tank if applicable) is ready for inspection and connection to the public sewer. The connection and testing shall be made under the supervision of the Superintendent or his representative.
- K. All excavations for building sewer installation shall be adequately guarded with barricades and warning 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.

- L. Any person responsible for discharges through a building sewer carrying industrial wastes shall, at its own expense:
  - 1. Install an accessible and safely located control manhole;
  - 2. Install meters and other appurtenances to facilitate observation, sampling, and measurement of the waste.
  - 3. Maintain the equipment and facilities.

Such control manhole, meters, and other monitoring appurtenances shall be lockable, and accessible by the city. (Ord. No. 93-145, Art. IV.)

### 10.04.05 Use of public sewers

- A. No person(s) shall discharge or cause to be discharged any unpolluted waters such as stormwater, groundwater, roof runoff, subsurface drainage, or cooling water to any sanitary sewer.
- B. Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers or to a natural outlet approved by the city.
- C. No person(s) shall discharge or cause to be discharged any of the following described water or wastes to any public sewer:
  - 1. Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquids, solids, 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 waste treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the wastewater treatment plant.
  - 3. Any water or wastes having a pH lower than 6.0 or in excess of 9.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the wastewater 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 wastewater facilities such as, but not limited to, ashes, bones, 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, egg shells, etc., either whole or ground by garbage grinders.
- 5. No substance will be added which would preclude the selection of the most cost effective alternative for wastewater treatment and sludge disposal.
- D. The following described substances, materials, waters, or wastes shall be limited in discharges to municipal systems to concentrations or quantities which will not harm either the sewers, wastewater treatment process or equipment, will not have an adverse effect on the receiving stream, or will not otherwise endanger lives, limb, public property, or constitute a nuisance. The Superintendent may set limitations more stringent than the limitations established in the regulations below if in his opinion such limitations are necessary to meet the above objectives. In forming his opinion as to the acceptability, the Superintendent will give consideration to such factors as the quantity of subject waste in relation to flows and velocities in the sewers, materials of construction of the sewers, the wastewater treatment process employed, capacity of the wastewater treatment plant, and other pertinent factors. The limitations or restrictions on materials or characteristics of wastes or wastewaters discharged to the sanitary sewer which shall not be violated without prior approval of the Superintendent are as follows:
  - 1. Any liquid or vapor having a temperature higher than one hundred fifty (150) degrees F. (sixty-five (65) degrees C);
  - 2. Any water or wastes containing fats, wax, grease, or oils in excess of fifty (50) mg/l; or containing substances which may solidify or become viscous at temperatures between thirty-two (32) and one hundred fifty (150) degrees F (0 to sixty-five 65° C);
  - 3. Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of 3/4 horsepower (0.56 kw) or greater shall be subject to the review and approval of the city;
  - 4. Any waters or wastes containing strong acid, iron pickling wastes, or concentrated plating solution whether neutralized or not, which are capable of causing damage or corrosion in the sewers or the sewage treatment plant or interfering with the sewage treatment process;
  - 5. Any waters 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 city for such materials;

- 6. Any waters or wastes containing phenols or other taste or odor producing substances in such concentration exceeding limits which may be established by the city 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;
- 7. Any radioactive wastes or isotopes of which exhibit a half-life or concentration as may exceed limits established by the city in compliance with applicable state or federal regulations;
- 8. Materials which assert or cause:
  - a. Unusual concentration of inert suspended solids (such as but not limited to diatomaceous 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 paint, dye, wastes and vegetable tanning solutions).
  - c. Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein; and
- 9. Any waters or wastes containing concentrations of materials, elements and/or compounds, soluble or insoluble, that may be harmful to the wastewater treatment facilities, the receiving stream and/or the environment.
- 10. 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 sewage treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving water.
- 11. Specific attention should be given to toxic materials and heavy metals. These materials constitute an immediate hazard to humans, animals and aquatic life and, in addition, may have cumulative effects. Dilution of such materials in lieu of treatment (removal) is not an acceptable policy.
- E. No person shall discharge or cause to be discharged materials which exert or cause BOD in excess of 250 mg/l, suspended solids in excess of 250 mg/l or oil and grease in excess of 50 mg/l without prior approval of the Superintendent and without paying a surcharge for the additional strength of the wastes.

- F. The storage of any material in areas draining into the city sewer which may create a hazard to the sewage works or treatment processes, or constitute a hazard to human being or animals, or the receiving stream shall be subject to review by the Superintendent. He may require reasonable safeguards to prevent discharge or leakage of such materials into the sewers.
- G. If any water 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 10.04.04 of this article, and which in the judgment of the Superintendent, may have a deleterious effect upon the sewage works, processes, equipment or receiving water, or which otherwise create a hazard to life or constitute a public nuisance, the city may:
  - 1. reject the wastes;
  - 2. require pretreatment of an acceptable condition for discharge to the public sewers in accordance with an approved implementation schedule; and/or
  - 3. require control over the quantities and rates of discharge. If the city permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to requirements of all applicable codes, ordinances and laws, and U.S. Environmental Protection Agency Guidelines for pretreatment; and/or
  - 4. require that a wastewater effluent retention basin be provided of adequate volume to insure that slugs of concentrated pollutants are not discharged into the public sewer. If the city requires the retention of wastewater effluent, the design and installation of the retention basin shall be subject to the review and approval of the city.
- H. 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 greases 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.
- I. 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.

- J. When directed to do so by the city, the owner of any property discharging industrial wastes shall have a qualified testing laboratory collect a representative sample of the industrial wastewater and have the appropriate physical, chemical, and biological tests performed on this sample. Qualified testing laboratories selected by the owner shall be acceptable to the city. The purpose of such tests shall be to determine the conformance of the wastewater characteristics to this ordinance. A report shall be made in writing to the city by the laboratory stating the results of the tests. Required sampling and testing shall be performed in accordance with the provisions of 10.04.05(K) of this article.
- K. All measurements, tests, and analysis of the characteristics of waters and wastes to which reference is made in this ordinance 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. 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. (Ord. No. 93-145, Art. V.)

### 10.04.06 Protection from damage

- A. No person(s) shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is a part of the wastewater facilities.
- B. No unauthorized person shall cover any manhole on a public sewer with earth or paving, or otherwise renders it inaccessible.
- C. No unauthorized person shall remove the earth cover from a public sewer so that less than two (2) feet of earth cover remains over the pipe bells. Approval to remove subsequent cover shall require written consent from the Superintendent. (Ord. No. 93-145, Art. VI.)

### 10.04.07 Power and authority of Superintendent

A. The Superintendent and other duly authorized employees bearing proper credentials shall be permitted to enter all properties for the purpose of inspection, observation, measurement, sampling and testing in accordance with the provisions of this ordinance. The Superintendent or his representatives shall have no authority to inquire into any processes, including metallurgical, chemical, oil, refining, ceramic, paper or other industrial processes beyond that point having a direct bearing on the kind and source of discharge.

- B. While performing the necessary work on private properties referred to in part A. above, the Superintendent or duly authorized employees shall observe all safety rules applicable to the premises established by the company. The company shall be held harmless for injury or death to city employees. The city employees shall observe all safety rules applicable to the premises established by the company. The city shall indemnify the company against loss or damage to its property by city employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions as required in 10.04.10.
- C. The Superintendent and authorized employees bearing proper credentials shall be permitted to enter all private properties through which the city holds a duly negotiated easement for the purpose of, but not limited to, inspection, observation, measurements, 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. No. 93-145, Art. VII)

### 10.04.08 Penalty for violation

- A. Any person found to be violating any provision of this ordinance except Section 10.04.06 shall be served by the city with 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.
- B. Any person who shall continue any violation beyond the time limit provided for in part A. of this article, and/or any person who shall be found to be violating the provisions of 10.04.06 of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be fined in an amount not more than Twenty-Five Dollars (\$25.00) for each violation or double that sum for each repetition of such offense or violation, and if the act is continuous in nature, in any sum not more than Twenty-Five Dollars (\$25.00) for each day that the same shall be unlawfully continued.
- C. Any person violating any of the provisions of this ordinance shall become liable to the city for any expenses, loss or damage occasioned the city by reason of such violation.
- D. In cases of repeated violations, the city may revoke the permission for discharge of wastes into the sewer system and effect the discontinuation of water service, sewer service, or both. (Ord. No. 93-145, Art. VIII.)

# **CHAPTER 10.08**

# **SEWER IMPROVEMENT DISTRICT**

### Sections:

10.08.01	Location of lots
10.08.02	Connection
10.08.03	Providing information

10.08.01 Location of lots Any lot located in the city of Lake City for which city sewer services are now provided shall be immediately added to the Lake City Sewer Improvement District Tax Assessment rolls for the calendar year 1981. (Ord. No. 1981-95, Sec. 1.)

10.08.02 Connection Any lot or parcel of property in the city of Lake City for which city sewer services are extended after the completion of the current project shall be added to the Tax Assessment rolls for the Lake City Sewer Improvement District Assessment at such time as services are made available at a time and place in which the property owner shall otherwise, be obligated to connect to the Sewer Project. (Ord. No. 1981-95, Sec. 2.)

10.08.03 Providing information The Mayor of Lake City shall provide any information needed by the Tax Assessor or Collector to add those persons and property to the tax rolls for the Lake City Sewer Improvement District Assessments. (Ord. No. 1981-95, Sec. 3.)

### **CHAPTER 10.12**

### **SEWER RATES**

### Sections:

10.12.01	Sewer rates
10.12.02	Billing
10.12.03	Financial management system
10.12.04	Review
10.12.05	Notification of sewer use rate
10.12.06	Customer appeal
10.12.07	User charge system

#### 10.12.01 Sewer rates

- A. The city hereby establishes as rates, to be charged for services furnished by the system, which the City Council finds and declares to be fair, reasonable and necessary, to be charged to all users who contribute wastewater to the system. The proceeds of such charges so derived will be used for the purpose of operating and maintaining, including replacement (OM&R), the system's wastewater treatment works. (Replacement is defined as expenditures for obtaining and installing equipment, accessories or appurtenances during the useful life of the system necessary to maintain the capacity and performance for which they were designed and constructed.) (Ord. No. 92-142, Sec. 1.)
- B. All users of the system shall be charged monthly \$2.50 for the first 2,000 gallons or portion thereof of metered water consumption (minimum) plus \$1.25 for each 1,000 gallons or portion thereof of metered water consumption thereafter for OM&R. In the case of users not on a meter basis, the manager of the system (the "Manager") shall establish water consumption based on a comparison of the nonmetered user with a metered user of similar class. Example: a non-meter family of four (4) will be compared to a typical family of four (4) with a water meter to establish water consumption.

All sewer users shall be classified by the Manager as residential, commercial or industrial.

# **User Charge Methodology:**

Total annual OM&R Cost in \$/1,000 gal. =

Total annual OM&R \$
No. of 1,000 gal. sold annually

C. <u>Excessive Strength Charges</u> For any user, when the BOD exceeds \*250 mg/1, the suspended solids exceed 250 mg/1, or when other pollutant concentrations exceed the range of concentrations of these pollutants in normal domestic sewage, a surcharge shall be added to the basic charge. This surcharge shall be calculated by the following formula:

$$C_s = (B_c (B) + S_c (S) + P_c (P)) V_u$$

 $C_s$  = a surcharge for wastewaters of excessive strength.

B<sub>c</sub> = Operation and Maintenance (O&M) cost for treatment of a unit of BOD.

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

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

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

 $P_c = O\&M$  cost for treatment of a unit of any pollutant.

P = Concentration of any pollutant from a user above a base level.V<sub>u</sub> = Volume contribution from a user per unit of time.

- D. <u>Charges for Extraneous Flows</u> The costs of O&M for all flows not directly attributable to users (such as infiltration/inflow) shall be distributed among users on the same basis as O&M charges.
- E. <u>Toxic Pollutants Charges</u> Each user that discharges any toxic pollutants which cause an increase in the cost of managing the effluent or the sludge of the system's treatment works shall pay for such increased costs.
- F. <u>Debt Service</u> All users of the system shall be charged a flat monthly fee of \$9.05. The charges represent the debt retirement for the city's bonds payable from system revenues ("Debt Service"). This fee will be charged to all active sewer users regardless of the amount of water used or wastewater discharged. Notwithstanding the above, if the issuance of the bonds is approved by the voters prior to May 1, 1993, and the ½ % sales and use tax will go into effect, the flat monthly fee for Debt Service shall be reduced from \$9.05 to \$4.92. (Ord. No. 93-146. Sec. 1.)
- G. <u>Total Minimum User Charge</u> The minimum monthly bill per user of the system shall be \$11.55 calculated as follows: OM&R for 2,000 gal. (minimum) (\$2.50) + Debt Service (\$9.05) = \$11.55; provided, however, if the issuance of the bonds is approved by the votes prior to May1, 1993, and the ½ % sales and use tax will go into effect, the minimum monthly bill per user of the system shall be \$7.42 calculated as follows: OM&R for 2,000 gal. (minimum) (\$250) + Debt Service (\$4.92) = \$7.42." (Ord. No. 93-146, Sec. 1.)
- H. <u>Tapping Fee</u> There shall be a tapping fee in an amount equal to the actual cost to the city for every customer who connects to the system.
- I. None of the sewer facilities or services afforded by the system shall be furnished without a charge being made therefore. (Ord. No. 92-142, Sec. 1.)

10.12.02 Billing Users of the system will be billed on a monthly basis with payment due ten (10) days after the date of billing. Users on metered water service will be billed on the same notice as water charges and will be designated as a separate entry. Users not on metered water service will be billed monthly on an individual notice for service based upon the water consumption established by the system.

<sup>\*</sup>Maximum limit for average domestic waste.

Users with delinquent accounts of 30 days will be notified in writing by the city where, during which hours of the day, and before whom disputed bills appropriately may be considered. If the user waives the opportunity to be heard, the services will be discontinued until such bill is paid. (Ord. No. 92-142, Sec. 2.)

- <u>10.12.03</u> Financial management system A financial management system shall be established and maintained by the city to document compliance with federal regulations pertaining to the bonds. Such system will account for all revenues generated and expenditures for OM&R. (Ord. No. 92-142, Sec. 3.)
- 10.12.04 Review The City Council will review the user charges at least annually and revise the rates as necessary to ensure that adequate revenues are generated to pay the costs of OM&R and that the system continues to provide for the proportional distribution of OM&R costs among users and user classes. (Ord. No. 92-142, Sec. 4.)
- 10.12.05 Notification of sewer use rate Each user shall be notified at least annually, in conjunction with the regular bill, of the sewer use rate and the portion of the user charges which are attributable to wastewater treatment. Costs shall be broken down to show the OM&R costs attributable to that user. (Ord. No. 92-142, Sec. 5.)

# 10.12.06 Customer appeal

- A. Any user who feels his user charge is unjust and inequitable may make written application to the Manager requesting a review of his user charge. Said written request shall, where necessary, show the actual or estimated average flow and/or strength of his wastewater in comparison with the values upon which the charge is based, including how the measurements or estimates where made.
- B. Review of the request shall be made by the Manager and if substantiated, the user charges for that user shall be recomputed based on the revised flow and/or strength data and the new charges shall be applicable to the next billing cycle/period. (Ord. No. 92-142, Sec. 6.)
- <u>10.12.07</u> User charge system The user charge system for the system shall take precedence over any terms or conditions of agreement or contracts between the city and any of the users which are inconsistent with applicable federal regulations regarding such user charge systems. (Ord. No. 92-142, Sec. 7.)

# **CHAPTER 10.16**

## **WATER RATES**

### Sections:

10.16.01 Water rates 10.16.02 Tapering with meter

10.16.01 Water rates The water usage of each customer shall be determined each month by meter measurement and the amount to be paid by each customer shall be computed on the basis of the following schedule of rates:

#### A.

For the first 2,000 gallons of water consumption per month (or portion thereof)	\$5.50 (minimum) (Ord. No. 2003-196, Sec. 1.)
For the next 3,000 gallons of water consumption per month (or portion thereof)	\$1.50 per 1,000 gal.
For the next 5,000 gallons of water consumption per month (or portion thereof)	\$1.25 per 1,000 gal.
For the next 10,000 gallons of water consumption per month (or portion thereof)	\$1.00 per 1,000 gal.
In excess of 20,000 gallons of water per month	\$ .75 per 1,000 gal.

- B. None of the facilities afforded by the water system shall be furnished without a charge being made therefore.
- C. The operation of the water system shall be on a fully metered basis. That is, that meters shall be installed at each water connection, and all bills for water services shall be rendered in the net amount due. If any water bill is not paid on or before the tenth day after the bill therefore shall be rendered a ten percent (10%) penalty shall be added and if any bill is not paid within thirty (30) days after the bill shall be rendered, water service shall be disconnected. There shall be no dual connections; there shall be not more than one user on a single meter.

D. <u>Tapping fee</u> There shall be a tapping fee in the amount of the actual cost to the city for each customer who hereafter connects with and uses the water system.

# E. <u>Meter deposit</u>

- 1. The city of Lake City has determined that it is in the city's best interest to adopt a method of charging a connection fee for establishing service to new customers of its water and sewer services in lieu of requesting deposits.
- 2. It is therefore ordained that from the effective date of this ordinance any person or entity that requests a hook-up to existing water and sewer service shall first pay a connection fee of One Hundred Dollars (\$100.00).
- 3. Nothing herein shall change the amount charged for the water and sewer services presently in existence. (Ord. No. 2005-214, Sec. 1-3.)
- F. <u>Reconnection charge</u> In the event any premises are disconnected from the system, the customer concerned, prior to reconnection, shall pay all delinquent charges, together with a reconnection charge of Five Dollars (\$5.00) for each reconnection of the premises to the water system. (Ord. No. 1980-90, Sec. 1.)

# 10.16.02 Tapering with meter

- A. It shall be unlawful for any person to destroy, remove, tamper with, adjust, turn on or off without authority, any water meter located inside the city limits of Lake City, Arkansas.
- B. It shall be unlawful for any person to activate water service to any house, apartment, mobile home, commercial or business building without first paying the required water deposit.
- C. Any person found guilty of violating this ordinance shall be guilty of a misdemeanor and fined not more than Seventy-Five Dollars (\$75.00). (Ord. No. 1979-87, Sec. 1-3.)

### **CHAPTER 10.20**

# **CROSS-CONNECTION CONTROL PROGRAM**

#### Sections:

Intent
Purpose
Definitions
Operating criteria
Facilities requiring backflow protection
Approval of backflow prevention devices
Non-compliance
Ownership
Installation and costs
Testing and maintenance

10.20.01 Intent In compliance with the state of Arkansas *Rules and Regulations Pertaining to Public Water Systems*, Section VII.E, the state of Arkansas finds it necessary for the health, safety and welfare of the people served by the water division of the city utilities department to adopt cross-connection control standards which establish the requirements for the design, construction and maintenance of connections to the public water supply. These standards are supplemental to and do not supersede or modify the Arkansas State Plumbing Code and its latest revisions under which the city operates. (Ord. No. 94-157, Sec. 1.1)

Cross-reference – Arkansas State Plumbing Code adoption Ord. Book 1, pg. 49.

<u>10.20.02 Purpose</u> The purposes of this ordinance are:

- A. To provide for the protection of the public potable water supply.
- B. To isolate at the service connection any actual or potential pollution or contamination within the consumer's premises and
- C. To provide a continuous, systematic and effective program of cross-connection control. (Ord. No. 94-157, Sec. 1.2)

#### 10.20.03 Definitions

**Backflow** shall mean the flow of water or other liquids, mixtures or substances into the distribution pipes of a potable supply of water from any source other than its intended source.

**Backflow preventer** shall mean a device or means to prevent backflow.

**Double-Check Valve Assembly** (DC) means an assembly composed of two (2) single, independently acting, approved check valves, including tightly closing shut-off valves located at each end of the assembly and suitable test cocks for testing the water-tightness of each check valve.

Reduced-Pressure Principle Backflow Prevention Assembly (RP) means a device containing a minimum of two (2) independently acting, approved check valves, together with an automatically operated pressure differential relief valve located between the check valves. The assembly will include two (2) cut-off valves and four (4) test cocks. (Ord. No. 94-157, Sec. 1.3)

10.20.04 Operating criteria It is the primary responsibility of the water purveyor and/or city of Lake City to evaluate the hazards inherent in supplying a consumer's water system, i.e., determine whether solid, liquid or gaseous pollutants or contaminants are, or may be, handled on the consumer's premise in such a manner as to possibly permit contamination of the public water system. When a hazard or potential hazard to the public water system is found on the consumer's premises, the consumer shall be required to install an approved backflow prevention device at each public water service connection to the premises in accordance with this ordinance's requirement. The type of device shall depend on the degree of hazard involved.

The type of protective device required shall depend on the degree of hazard shall be as described in AWWA Manual M-14 or as described below. Where more than one type of protection is possible, the actual method utilized shall be at the discretion of the water purveyor and or city of Lake City after physical inspection of the hazard.

- A. In the case of any premises where there is an auxiliary water supply, there shall be no physical connection between said auxiliary water supply and the consumer's water system which is served by the public water supply system. Where such connections are found, disconnections shall be accomplished and the public water system shall be protected against the possibility of future reconnection by an approved reduced-pressure-principal backflow prevention device at the service connection.
- B. In the case of any premises where this is water or a substance that would be objectionable but not hazardous to health, if introduced into the public water system, the public water system shall be protected by an approved double-check valve assembly.
- C. In the case of any premises were there is any material dangerous to health which is handled in such a fashion as to create an actual or potential hazard to the public water system, the public water system shall be protected by an approved reduced-pressure principal backflow prevention assembly.

- D. In case of any premises where this are "uncontrolled" cross-connections, either actual or potential, the public water system shall be protected by an approved reduced-pressure principle backflow prevention assembly at the service connection.
- E. In the case of any premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete inplant cross-connection survey, the public water system shall be protected by the installation of an approved reduced-pressure principal backflow prevention assembly at the service connection. (Ord. No. 94-157, Sec. 1.4)

10.20.05 Facilities requiring backflow protection The following is a partial list of facilities which may require reduced-pressure principal backflow preventers at the service connection. Requirements are based upon the degree of hazard afforded the public potable water system.

- 1. Automatic car washes
- 2. Auxiliary water systems
- 3. Exterminators
- 4. Facilities with boilers or chilled water systems
- 5. Fire systems
- 6. Hospitals, medical clinics, sanitariums, morgues, mortuaries, autopsy facilities, nursing and convalescent homes and clinics
- 7. Irrigations systems
- 8. Laboratories (industrial, commercial, photography, medical and school)
- 9. Laundries
- 10. Radiator shops
- 11. Restricted, classified or other closed facilities
- 12. Sand and gravel plants
- 13. Wastewater treatment plants, pump stations and storm water pumping facilities
- 14. Waterfront homes, facilities and industries
- 15. Swimming pools
- 16. Others as found with high hazards

The following is a partial list of facilities which may require double check valve assemblies:

- 1. Apartments
- 2. Beauty parlors and barber shops
- 3. Doctors and dental offices
- 4. Greenhouses and nurseries
- 5. Hotel and motels
- 6. Laundry and cleaners
- 7. Restaurants and food handlers

- 8. Service stations
- 9. Others, as found with suspected low hazards (Ord. No. 94-157, Sec. 1.6)

10.20.06 Approval of backflow prevention devices Any backflow prevention device required herein shall be a type in accordance with AWWA specification C506-78 or its latest revision, the Arkansas Department of Health Regulation and the water purveyor and/or the city of Lake City. (Ord. No. 94-157, Sec. 1.7)

<u>10.20.07 Non-compliance</u> Service to be discontinued. Notice: Consent to entry.

- A. In emergency situations when the public potable water supply is being contaminated or is in immediate danger of contamination, the water service will be discontinued by the water purveyor and/or superintendent.
- B. No water service connection shall be installed on the premises of any consumer unless the public potable water system is protected as required by this article.
- C. Delivery of water to premises of any consumer may be discontinued by the water purveyor and/or the city of Lake City if any protective device required by this article has not been installed, or is defective, or has been removed or bypassed. Discontinued water service shall not be resumed until conditions at the consumer's premise have been abated or corrected to the satisfaction of the water purveyor and/or superintendent.
- D. Upon discovery of a violation of this code, written notice shall be given to the consumer. If violations are not corrected by date and time as stated on the notice, the water supply will be discontinued and the violation will be referred to the Water Commission for further action.
- E. For the purpose of making any inspections or discharging the duties imposed by this article, the water purveyor and/or the city of Lake City, the State Health Department, and/or Plumbing Inspector shall have the right to enter upon the premises of any consumer. Each consumer, as a condition of the continued delivery to his premises of water from the public water supply, shall be considered as having stated his consent to the entry upon his premise of the water purveyor and/or superintendent the State Health Department and/or Plumbing Inspector for the purpose stated herein. (Ord. No. 94-157, Sec. 1.8)

<u>10.20.08</u> Ownership The consumer shall purchase, own and maintain all backflow prevention assemblies installed at the point of delivery to the consumer's water systems. (Ord. No. 94-157, Sec. 1.9)

10.20.09 Installation and costs Customers of the city water division requiring backflow prevention devices shall pay all cost associated with installation of the appropriate size and type of device under private contract. New installations shall be completed prior to the "final" plumbing inspection so that the device can be included as part of the inspection. Devices shall be installed above ground in a location that is readily accessible for maintenance and testing and should be located not less than twelve (12) inches nor more than thirty (30) inches above ground. (Ord. No. 94-157, Sec. 1.10)

10.20.10 Testing and maintenance The consumer will be responsible for the annual testing of the backflow prevention assembly by contract with a certified backflow assembly tester. The consumer will annually furnish water purveyor and/or the city with a certificate of such satisfactory testing by the anniversary date of the installation of the assembly. In instances where the water purveyor, the city and/or Plumbing Inspector deems the hazard to be great enough, testing may be required at more frequent intervals, costs of which would be borne by the consumer. Any maintenance fees required as a result of inspections or testing shall be paid by the consumer through private contract. Records of inspections, testing or repairs shall be kept by the water purveyor and/or the city and made available to the State Health Department.

All new construction within the city of Lake City shall be effective upon passage of this ordinance. All existing consumer premises shall be in compliance with this ordinance by January 1, 1996. (Ord. No. 94-157, Sec. 1.11.)

# **CHAPTER 10.24**

# **WELLHEAD PROTECTION**

#### Sections:

10.24.01	Statement of purpose
10.24.02	Implementation of the Wellhead Protection Program
10.24.03	Basis for delineating a Wellhead Protection Area
10.24.04	Land to which this ordinance applies
10.24.05	Administration
10.24.06	Severability
10.24.07	Conflict with other provisions
10.24.08	Miscellaneous

10.24.01 Statement of purpose It is the purpose of this ordinance to:

A. Promote the public health, safety, and general welfare of the citizens of Lake City,

- B. Minimize the financial and other losses which would be incurred by contamination of the public water supply.
- C. Implement a Wellhead Protection program following guidelines of the Arkansas Department of Health that will help insure the provision of potable ground water to our citizens now and in the future.
- D. Contribute to the general public effort of protecting and conserving the natural resource of our state for future generations. (Ord. No. 2008-230, Sec. B.)

10.24.02 Implementation of the Wellhead Protection Program Implementation of the Wellhead Protection Program shall consist of several parts which may be phased in at the discretion of the city of Lake City and over the time period deemed reasonable and adequate for the city of Lake City. The parts shall include:

- A. Establishment of a Wellhead Protection Area around each well or well field.
- B. Inventory of the potential sources of contamination within the Wellhead Protection Area on a periodic basis.
- C. Restriction, prohibitions, or other kinds of controls of these potential sources as well as activities that could cause groundwater to become contaminated within the Wellhead Protection Area.
- D. Periodic monitoring of selected chemical parameters of the water from selected wells within the Wellhead Protection Area to provide early warning of contaminated groundwater moving towards public supply wells.
- E. Establishment of an Emergency Action Plan to be implemented if a contamination event should occur. (Ord. No. 2008-230, Sec. C.)

10.24.03 Basis for delineating a Wellhead Protection Area The Wellhead Protection Area shall be delineated (i.e., its boundaries determined) by a qualified hydro geologist using the methodology warranted by the kind, quality, and quantity of the hydro geologic data and information available or obtainable. However, the city of Lake City retains the right to adjust the size and shape of the area according to its specific needs and goals. All delineations and subsequent changes must receive concurrence from the Arkansas Department of Health, Division of Engineering before final acceptance by the city of Lake City.

If new data should become available pertinent to well yield, hydrogeology and water-bearing characteristics of the aquifer used, and this new data changes the size or shape of the original Wellhead Protection Area accepted by the City Council, then the City Council may deem by special vote or action the adjusted boundary to be the correct legal boundary of the Wellhead Protection Area. (Ord. No. 2008-230, Sec. D.)

- 10.24.04 Land to which this ordinance applies This ordinance shall apply to all lands located within the delineated Wellhead Protection Area(s) as adopted by the City Council, and within the jurisdiction of the city of Lake City. (Ord. No. 2008-230, Sec. E.)
- 10.24.05 Administration The policies and procedures for the administration of the Wellhead Protection Area(s) established in pursuance of this ordinance, including application, variances, enforcement, and penalties, shall be determined by the City Council or the pertinent legally appointed entity. (Ord. No. 2008-230, Sec. F.)
- 10.24.06 Severability It is hereby declared to be the intention of the city of Lake City, that the sections, paragraphs, sentences, clauses, and phrases of this ordinance are severable, and if any such section, paragraph, sentence, clause, or phrase is declared unconstitutional or otherwise invalid by any court of competent jurisdiction in a valid judgment or decree, such unconstitutionality or invalidity shall not affect any of the remaining sections, paragraphs, sentences, clauses, or phrases of this ordinance since the same would have been enacted without the incorporation into this ordinance of such unconstitutional or invalid section, paragraph, sentence, clause or phrase. (Ord. No. 2008- 230, Sec. G.)
- 10.24.07 Conflict with other provisions In the event that any provision, standard, or requirement of this ordinance is found to be in conflict with any provision of any other ordinance or code of the city of Lake City, the provision which established the higher standard or more stringent requirement for the promotion and protection of the health and safety of the residents shall prevail. (Ord. No. 2008-230, Sec. H.)

#### 10.24.08 Miscellaneous

- A. As used in this ordinance, words importing the masculine gender include the feminine and neuter.
- B. Words used in the singular in this ordinance include the plural and words used in the plural include the singular. (Ord. No. 2008-230, Sec. I.)