

ARTICLE III. - SEWER USE AND WASTEWATER REGULATIONS^[2]

Sec. 29-51. - Requirements.

- (a) *Use required.* The owner of all houses, buildings or properties used for human occupancy, employment, recreation or other purposes situated within the jurisdiction of the authority and abutting any street, alley or right-of-way in which there is now located or may in the future be located a public sewer of the authority is hereby required, at his expenses, to install sanitary facilities therein and to connect such facilities directly with the proper public sewer in accordance with the provisions of this article within sixty (60) days after the date of official notice to do so, provided that the public sewer is within two hundred (200) feet of the property line and provided that said public sewer is adequate to handle the additional connection.
- (b) *Installation.* Sump pumps are to be installed for the purpose of discharging clear water from foundation drains and ground infiltration. All water shall discharge into an underground conduit leading to a drainage ditch for that purpose or to an approved separated storm sewer collection point. If neither is reasonably available then water may discharge outside of a building;
- (1) On a grassed or landscaped area on the same property as the structure;
 - (2) At least two (2) feet from the building;
 - (3) No closer than ten (10) feet from the property of adjacent owners.

The place of discharge shall be determined at the point where the water is discharged upon the ground from hoses, pipes and other connections to the sump pump.

Violation. No water shall be discharged from a sump pump if the discharge creates icing problems on roads or walkways, or creates a situation causing damages to roads or to property, or creates ponds of standing or stagnant water or water flows over adjoining properties.

Corrective action. If such condition exists or is created, the inspector shall require the owner of the property discharging the water to make corrections which shall cause the water from the sump pump to be discharged in such a manner as not to interfere with the use of property by adjacent property owners.

- (c) *Waste.* It shall be unlawful for any person to place, deposit or permit to be deposited in an unsanitary manner upon public or private property in any area under the jurisdiction of the authority any human or animal excrement, garbage, or other objectionable waste which ordinarily would be regarded as sewage or industrial wastes.
- (d) *Wastewater disposal.* No person shall place, deposit, or permit to be deposited in an unsanitary manner on public or private property within the jurisdiction of the authority any wastewater or other polluted water except where suitable treatment has been provided in accordance with provisions of this section and the

NPDES permit. All disposal by any person into the sewer system is unlawful except those discharges in compliance with federal standards promulgated pursuant to the Federal Clean Water Act and more stringent state and local stands.

- (e) *Stormwaters, etc.* Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewer or to a natural outlet approved by city authorities. Industrial cooling water or unpolluted process waters may be discharged, on approval of the authority, to a storm sewer or natural outlet.
- (f) *Combined sewers:*
 - (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 combined sewer or sanitary sewer. Any building constructed after the enactment of this section shall be permitted to connect sanitary sewers to combined sewers.
 - (2) Inflow sources on the combined sewer system shall be connected to a storm sewer, within a reasonable period of time, if a storm sewer becomes available.
- (g) *Natural outlet.* No person shall discharge or cause to be discharged to any natural outlet any wastewater or other polluted waters except where suitable treatment has been provided in accordance with provisions of this section and the NPDES permit.
- (h) *Flows.* Users of the wastewater treatment system shall immediately notify the authority of any manual flows or wastes that are discharged accidentally or otherwise to the sewer system.

(Ord. No. 97-O-52, § 1, 11-24-97; Ord. No. 2011-O-04, § 2, 3-28-11)

Sec. 29-52. - Plumbing code.

In addition to the regulations for use of the city's wastewater treatment system as contained in this section, there is hereby incorporated by reference the plumbing code of the city, which regulations shall be considered part of the contract between the city and every person connecting to the city's wastewater treatment system. In the absence of ordinance or plumbing code provisions, or in amplification thereof, the materials and procedures set forth in appropriate specifications of the American Society of Testing Materials, the Water Pollution Control Federation Manual of Practice No. 9, the Standard Specifications for Water and Sewer Main Construction in Illinois, and the Illinois Plumbing Code shall apply. All such regulations shall be considered part of the contract between the city and every person connecting to the city's wastewater system.

(Ord. No. 97-O-52, § 1, 11-24-97)

Sec. 29-53. - Prohibited connections.

It shall be unlawful for any person, firm, or corporation to connect or cause to be connected, any drain carrying, or to carry, any toilet, sink, basement, septic tank, cesspool, industrial water, or any fixture or device discharging polluting substances, to any stormwater drain under the jurisdiction of the City of Jacksonville.

(Ord. No. 97-O-52, § 1, 11-24-97)

Sec. 29-54. - Discharges.

- (a) *Prohibited substances.* 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 authority that such waste can harm either the sewers, wastewater treatment system, or equipment, can have an adverse effect on the receiving stream, or can otherwise endanger life, limb, public property or can constitute a nuisance. In forming its opinion as to the acceptability of these wastes, the authority will give consideration to such factors as the 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, degree of treatability of wastes in the sewage treatment plant, and maximum limits established by regulatory agencies. The substances prohibited are:
- (1) *Petroleum products.* Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid or gas.
 - (2) *Toxic.* 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.
 - (3) *pH factor.* Any waters or wastes having a pH lower than six (6.0) or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the wastewater treatment system. Any waters or wastes having a pH in excess of nine (9.0).
 - (4) *Solids.* 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 treatment system 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, paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.
 - (5) *BOD and TSS.* Any waters or wastes having a five-day biochemical oxygen demand concentration greater than two hundred (200) mg/l or total suspended solids concentration greater than two hundred fifty (250) mg/l unless prior approval is received in writing from the City of Jacksonville.
 - (6) *Temperatures.* Any liquid or vapor having a temperature higher than one hundred fifty (150) degrees

Fahrenheit (sixty-five (65) degrees centigrade).

- (7) *Fats, oils and grease*: Any waters or wastes containing fats, animal or vegetable oils, petroleum or mineral oils, waxes or grease, 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 (32) degrees Fahrenheit and one hundred fifty (150) degrees Fahrenheit (sixty-five (65) degrees centigrade).
- (8) *Shredded*. Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths ($\frac{3}{4}$) horsepower (0.76 hp metric) or greater shall be subject to the review and authority approval.
- (9) *Acids, etc.* Any waters or wastes containing strong acid, iron pickling wastes, or concentrated plating solutions whether neutralized or not.
- (10) *Metals*. Any waters or wastes containing iron, chromium, copper, zinc, or similar objectionable or toxic substances; or wastes exerting an excessive chlorine requirement, to such degree that any such material received the composite sewage at the sewage treatment works exceeds the limits established by the authority for such materials.
- (11) *Chemicals*. Any waters or wastes containing phenols or other taste or odor-producing substances, in such concentrations exceeding limits which may be established by the authority 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.
- (12) *Radioactive*. Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the authority in compliance with applicable state or federal regulations.
- (13) *Mercury*. Any mercury or any of its compounds in excess of five ten thousandths (0.0005) mg/l of Hg at any time except as permitted by the authority in compliance with applicable state and federal regulations.
- (14) *Cyanide*. Any cyanide in excess of twenty-five one thousandths (0.025) mg/l at any time except as permitted by the authority in compliance with applicable state and federal regulations.
- (15) *Materials*. Materials which exert or cause:
 - a. *Concentrations*. 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);
 - b. *Discolorations*. Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions);
 - c.

BOD, etc. Unusual BOD, total suspended solids, chemical oxygen demand, chlorine requirements, or ammonia in such quantities as to constitute a significant load on the sewage treatment works.

d. *Volume.* Unusual volume of flow or concentrations of wastes constituting "slugs" as defined herein.

(16) *Nontreatable.* 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 agencies having jurisdiction over discharge to the receiving waters.

(b) *Action.* 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 this section and/or which are in violation of the standards for pretreatment provided in the Federal Clean Water Act and any amendments thereto, and which in the judgement of the authority 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 authority 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;
- (4) Require payment to cover the added costs to handling and treating the wastes not covered by existing taxes or sewer charges, under the provisions of this section.

(c) *Pretreatment.* If the authority 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 authority, and subject to the requirements of all applicable codes, ordinances and laws.

(Ord. No. 97-O-52, § 1, 11-24-97)

Sec. 29-55. - Sewer interceptors.

(a) *Requirements.* Plumbing systems for institutions or commercial establishments in which grease, fats, culinary oils, or similar waste products from kitchens or food processing areas are wasted, or in which grease, fats, or culinary oils are wasted in connection with utensil, vat, dish, or floor cleaning processes, shall include grease interceptors. All waste lines and drains carrying grease, fats, or culinary oil, in the above type establishments shall be directed to one or more interceptors.

(b)

Types required. Grease, oil and sand interceptors shall be provided when, in the opinion of the authority, they are necessary for the proper handling or treatment of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients. All interceptors shall be of a type and capacity approved by the authority and shall be located as to readily and easily accessible for cleaning and inspection.

- (c) *Construction.* All required interceptors shall comply with the provisions of the Illinois Plumbing Code, Subpart E: Interceptors-Separators and Backwater Valves. As a minimum size, a grease interceptor installed on the same floor as the fixture shall have one-half the liquid holding capacity of the fixture. A grease interceptor located on a floor below the fixture shall have sixty (60) percent of the liquid holding capacity of the fixture.
- (d) *Maintenance.* Where preliminary treatment or flow-equalizing facilities or grease, oil, and sand interceptors are provided, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense. No person may cause or allow the transportation of fats, oils, or grease away from the grease trap at which such materials were collected unless such materials are accompanied by a shipping paper containing a Illinois Department of Agriculture permit number as required by Illinois Public Act 88-633.

(Ord. No. 97-O-52, § 1, 11-24-97)

Sec. 29-56. - Metering and sampling.

- (a) *Required for Industries and other nondomestic users.* Each nondomestic user shall be required to install a control manhole and, when required by the authority, the owner of any property serviced by a building sewer carrying nondomestic 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 accessible and safely located and shall be in accordance with plans approved by the authority. The manhole shall be installed and operated by the owner at his expense and shall be maintained by him so as to be safe and accessible at all times.
- (b) *Industrial wastes.* The owner of any property serviced by a building sewer carrying industrial wastes shall provide laboratory measurements, tests and analyses of waters and wastes to comply with this section and any special conditions for discharge established by the authority or regulatory agencies having jurisdiction over the discharge.

The number, type and frequency of laboratory analyses to be performed by the owner shall be as stipulated by the authority, but no less than once per year the industry must supply a complete analysis of the constituents of the wastewater discharge to assure that compliance with the federal, state and local standard are being met. The owner shall report the results of measurements and laboratory analyses to the authority at such times and

in such manner as prescribed by the authority. The owner shall bear the expense of all measurements, analyses, and reporting required by the authority. At such times as deemed necessary, the authority reserves the right to take measurements and samples for analyses by an outside laboratory service.

- (c) *Measurements, etc.* All sampling and analysis of the characteristics of waters and wastes to which reference is made in this section shall be performed in accordance with the techniques prescribed in the current Environmental Protection Agency. Sampling and analytical techniques may be further specified by the city in order to assess the effect of wastewater constituents upon the wastewater treatment system and to determine the existence of hazards to life, limb and property. Where the current EPA requirements do not contain sampling and analytical techniques for the pollutant in question, sampling and analysis must be performed using procedures approved by the city.

Samples shall be taken at the control manhole. Certain analyses (i.e., pH, DO, conductivity, etc.) may be directly performed upon grab samples taken periodically at the control manhole while BOD and total suspended solids analyses are normally performed upon twenty-four-hour composite samples taken at the control manhole. If a control manhole does not exist, then sampling and analysis will be performed at the manhole immediately downstream from the point where the building sewer connects to the public sewer, or at another point acceptable to the city, including the user's building and grounds.

- (d) *Agreements.* No statement contained in this section shall be construed as preventing any special agreement or arrangement between the authority and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the authority for treatment, subject to payment therefor by the industrial concern, provided such payments are in accordance with federal and state guidelines for wastewater charge system.

(Ord. No. 97-O-52, § 1, 11-24-97)

Sec. 29-57. - Underground tank excavation and contents.

All persons engaged in the disposal of all materials associated with excavation and contents of underground gasoline and diesel fuel storage tank shall comply with the following:

- (a) Obtain permits from the State Fire marshal's office.
- (b) Give immediate notice to the Emergency Services Disaster Agency (ESDA) and the Illinois E.P.A. Leaking Underground Storage Tank (LUST) Unit if it is determined that the tank has leaked to soils or groundwater areas around the tank.
- (c) Soil and water samples must be taken under the direction of the Illinois EPA Land Permit Section to verify that no leakage has occurred regardless of other procedures for evaluation.

- (d) After all of the proper agencies have been notified and the necessary permits obtained, analysis must be performed on tank contents (if any) and on ground or rain water that may have accumulated in the excavation. This must be done to determine disposal options (i.e., discharge to Jacksonville public sewers or hauled off to an offsite disposal area). Analysis requirements are as follows:

Gasoline Tanks

Pollutant	Limit
Benzene	*
Toluene	*
Ethylbenzene	*
Total Xylenes	*
Chlorobenzene	*
1,2 Dichlorobenzene	*
1,3 Dichlorobenzene	*
1,4 Dichlorobenzene	*
N-Hexane (Gasoline only)	*
*Total of all of the above	4.57 mg/l
Lead	5.81 mg/l,

DIESEL FUEL TANKS

Diesel fuel tanks require the same analysis as required for gasoline tanks plus 46 Base Neutral organics as listed below. Total level of all pollutants cannot exceed 4.57 mg/l (except Lead which has an individual limit of 5.81 mg/1)

Base Neutral Organics

1.	Acenaphthene	22. 1, 4-Dichlorobenzene
2.	Acenaphthylene	23. 3, 3-Dichlorobenzidine
3.	Anthracene	24. Diethyl Phthalate
4.	Benzidine	25. Dimethyl Phthalate
5.	Benzo(A) Anthracene Phthalate (1,2-benzothracene)	26. .Di-N-Butyl Phthalate
		27. 2,4-Dinitrotoluene
6.	Benzo(A) Pyrene (3,4-benzo Pyrene)	
		28. 2,6-Dinitrotoluene
		29. .Di-N-Octyl Phthalate
7.	Benzo(15) Fluoranthene	30. 1,2-Diphenylhydrazine
	(benzo b fluoranthene)	31. .Fluoranthene
8.	Benzo(GHI)Perylene (1,12-benzoperylene)	32. Fluorene
		33. Hexachlorobenzene

9.	Benzo(K) Fluoranthene (11, 12-benzo fluoranthene)	34. Hexadhlorobutadiene
		35. Hexachlorocyclopentadine
10.	Bis. less (2-Chloroethoxy) Methane	36. Hexachlorethane
11.	Bis. (2-Chlorethyl) Ether	37. Indeno less (1,2,3-CD) Pyrene
12.	Bis. (2-Chloroisopropyl) Ether	(2,3-o-phenylene pyrene)
13.	Bis. (2-Ethylhexyl) Phthalate	38. Isophorone
14.	4-Bromophenyl Phenyl Ether	39. Naphthalene
15.	Butyl Benzyl Phthalate	40. Nitrobenzene
16.	2-Chloronapthalene	41. N-Nitrosodiemethylamine
17.	4-Chlorophenyl Phenyl Ether	42. N-Nitrosodi-N-Propylamine
18.	Chrysene	43. N-Nitrosodiphenylamine
19.	Dibenzo (A,H) Anthracene (1,2,5,6-dibenzanthracene)	44. Phenanthrene
		45. Pyrene
20.	1,2-Dichlorobenzene	46. 1,2,4-Trichlorobenzene
21.	1,3-Dichlorobenzene	

Written analysis results must be forwarded to the utilities superintendent, operations for review and determination if materials are acceptable for discharge.

- (e) Provided that the analysis results are above pollutant limits and the responsible party elects to treat the waste to achieve the limits, a permit to do so from the Illinois E.P.A. Water Pollution Industrial Unit shall be obtained.

Oil and water separation followed by air stripping may be a treatment requirement. If the method of treatment selected involves air stripping of volatiles, then an Illinois EPA air permit must also be obtained.

- (f) Following treatment, resampling and analysis shall be performed to verify that pollutant levels are at or below limits.
- (g) Permit approval and discharge location shall be determined by the utilities superintendent, operations. Off-site disposal area permits and contracts with a licensed waste hauler shall be at the responsibility of the applicant.
- (h) If the tank involved contained or had contained any material other than underground gasoline or diesel fuel tanks, such as solvent, different analysis and disposal criteria may be required.

(Ord. No. 97-O-52, § 1, 11-24-97)

Sec. 29-58. - Definitions.

Unless the context specifically indicates otherwise, the meaning of terms used in this article shall be as follows:

- (1) *Authority*. The mayor and city council of the City of Jacksonville, Morgan County, Illinois, and its duly authorized employees.
- (2) *Biochemical oxygen demand (BOD)*. The quantity of oxygen, expressed in milligrams per liter (mg/l), utilized in the biochemical oxidation of organic matter under standard procedures in five (5) days at twenty (20) degrees centigrade.
- (3) *Building drain*. 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 a building and conveys it to the building sewer five (5) feet outside the building wall.
 - a. *Building drain, sanitary*. A building drain which conveys sanitary or industrial sewage only, and to which storm, surface and groundwater are not intentionally admitted.

- b. *Building drain, storm.* A building drain which conveys storm, surface, or groundwater drainage, but no sanitary or industrial sewage, other than unpolluted cooling water.
- (4) *Building sewer.* The extension from the building drain to the public sewer or other place of disposal.
- a. *Building sewer, sanitary.* A building sewer which conveys sanitary or industrial sewage only.
 - b. *Building sewer, storm.* A building sewer which conveys a stormwater or other clear water drainage but no sanitary or industrial sewage.
- (5) *Classes of users.* The division of wastewater treatment customers by waste characteristics and process or discharge similarities.
- a. *Residential.* Includes all dwelling units such as detached, semidetached, and row houses, mobile homes, garden and standard apartments, and permanent multifamily dwellings.
 - b. *Commercial.* Includes transient lodging, retail and wholesale establishments or places engaged in selling merchandise for personal, household or industrial consumption, and/or rendering services to others.
 - c. *Institutional.* Includes social, charitable, religious and educational activities such as schools, churches, hospitals, nursing homes, penal institutions and similar institutional users.
 - d. *Governmental.* Includes legislative, judicial, administrative and regulatory activities of federal, state and local governments, such as courthouses, police and fire stations, city halls and similar governmental users.
 - e. *Industrial.* Includes manufacturing activities involving the mechanical or chemical transformation of materials or substances into other products. These activities occur in establishments usually described as plants, factories, or mills and characteristically use power machines and material handling equipment.
- (6) *Combined sewage.* A combination of both sanitary and industrial wastewater and storm, surface or groundwater.
- (7) *Combined sewer.* A sewer intended to receive wastewater, storm, surface, and groundwater drainage.
- (8) *Compatible pollutant.* A pollutant for which the wastewater treatment works is designed to treat and includes biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria, or a pollutant for which the plant is able to remove to a substantial degree, being eighty (80) per cent or greater.
- (9) *Depreciation.* An annual operating cost reflecting capital consumption and obsolescence of the treatment works.
- (10) *Easement.* An acquired legal right for the specific use of land owned by others.
- (11) *Fecal coliform.* Any of a number of organisms common to the intestinal tract of men and animals, whose presence in sanitary sewage is an indicator of pollution.

- (12) *Floatable oil.* Oil, fat, or grease in a physical state, such that it will separate by gravity from wastewater by treatment in a pretreatment facility. A wastewater shall be considered free of floatable oil if it is properly pretreated and the wastewater does not interfere with the wastewater treatment process.
- (13) *Garbage.* Solid wastes from the domestic and commercial preparation, cooking and dispensing of food, and from the commercial handling, storage and sale of produce.
- (14) *Incompatible pollutant.* Any pollutant that is not defined as a compatible pollutant, including nonbiodegradable dissolved solids.
- (15) *Industrial user.* Any nongovernmental user of the publicly owned wastewater treatment system, identified in the Standard Industrial Classification Manual, 1972, Office of Management and Budget, as amended.
- (16) *Industrial wastes.* Industrial waste shall mean any solid, liquid or gaseous substance discharged, permitted to flow or escaping from any industrial, manufacturing, commercial or business establishment or process or from the development, recovery or processing of any natural resources as distinct from sanitary sewage.
- (17) *Infiltration.* The water entering a sewer system, including building drains and sewers, from the ground, through such means as, but not limited to, defective pipes, pipe joints, connections or manhole walls.
- (18) *Infiltration/flow.* The total quantity of water from both infiltration and inflow without distinguishing the sources.
- (19) *Inflow.* The water discharged into a sewer system, including building drains and sewers, from such sources as, but not limited to, roof leaders, cellar, yard and area drains, foundation drains, unpolluted cooling water discharges, drains from springs and swampy areas, manhole covers, cross-connections with storm sewers and combined sewers, catch basins, stormwaters, surface runoff, street wash waters or drainage.
- (20) *Inspector.* The person or persons duly authorized by the authority to inspect and approve the installation of building sewers and their connection to the public sewer system.
- (21) *Major contributing industry.* An industry that either (a) has a flow of fifty thousand (50,000) gallons or more per average work day, or (b) has a flow greater than ten (10) per cent of the flow carried by the public wastewater treatment system receiving the waste, or (c) has in its waste a toxic pollutant in toxic amounts as defined in standards issued under the Federal Clean Water Act, or (d) is found by the permit issuance authority, in connection with the issuance of the NPDES permit to the publicly owned wastewater treatment system receiving the waste, to have significant impact, either singly or in combination with other contributing industries, on that treatment works or upon the quality of effluent from that wastewater treatment system.

- (22) *Metered usage.* The metered water usage of any individual customer, unless separate metering of sewage flow is provided by the customer, wherein it shall mean metered sewage flow of any individual customer.
- (23) *Natural outlet.* Any outlet, including storm sewers and combined sewer overflows, into a watercourse, pond, ditch, lake or other body of surface or groundwater.
- (24) *Nonindustrial users.* All other users of the treatment works other than industrial users.
- (25) *Normal domestic sewage.* As defined for the purpose of determining surcharge limits, a wastewater or sewage having an average daily suspended solids concentration of not more than two hundred fifty (250) mg/l, and average daily BOD of not more than two hundred (200) mg/l.
- Average daily* is defined for the purposes of this ordinance as the average of proportional readings taken in the twenty-four-hour period starting at 12:00 a.m. (midnight) and ending at 12:00 a.m. (midnight) the next day.
- (26) *NPDES permit.* A permit issued under the National Pollutant Discharge Elimination System for discharge of wastewaters to the navigable waters of the United States pursuant to the Federal Clean Water Act.
- (27) *Operation, maintenance and replacement costs.* All costs, direct and indirect, including scheduled replacement costs necessary to ensure adequate wastewater treatment on a continuing basis, conforming with federal, state and local requirements, and assuring optimal long-term facility management. Such costs shall not include debt service costs.
- (28) *Person.* Any individual, firm, company, municipality, association, society, corporation, institution, enterprise, governmental agency or entity discharging wastewater to the wastewater treatment system.
- (29) *pH.* The negative logarithm of the hydrogen ion concentration. The concentration is the weight of hydrogen ions in grams per liter of solution. The pH of any discharge into the public sewer system shall not be less than 6.0 nor more than 9.0.
- (30) *Plumbing inspector.* The plumbing inspector of the City of Jacksonville, Illinois, and/or the Illinois State Plumbing Inspector.
- (31) *Pretreatment.* The treatment of industrial sewage from privately owned industrial sources prior to introduction into public treatment works.
- (32) *Properly shredded garbage.* 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 (½) inch (1.27 centimeters) in any dimension.

- (33) *Private sewer.* A sewer which is not owned by a public authority.
- (34) *Public authority.* Any governmental agency having jurisdiction by law over construction and use of a wastewater collection and wastewater treatment facility.
- (35) *Public sewer.* A sewer in which all owners of abutting properties have equal rights, and which is owned and controlled by the public authority and consisting of the following increments:
- a. *Collector sewer.* A sewer whose primary purpose is to collect wastewaters from individual point source discharges.
 - b. *Interceptor sewer.* A sewer whose primary purpose is to transport wastewater from collector sewers to a treatment facility.
 - c. *Force main.* A pipe in which wastewater is carried under pressure.
 - d. *Pumping station.* A station position in the public sewer system at which wastewater is pumped to a higher level.
- (36) *Replacement.* Expenditures for obtaining and installing equipment, accessories or appurtenances which are necessary during the service life of the treatment works to maintain the capacity and performance for which such works were designed and constructed.
- (37) *Sanitary sewer.* A sewer which carries sanitary and/or industrial wastes, and to which storm, surface and groundwater are not intentionally admitted.
- (38) *Sewage.* "Sewage" is used interchangeably with "wastewater." The combination of liquid and water-carried wastes from residences, commercial buildings, industrial plants, government facilities, and institutions of a community, together with any ground, surface water, and stormwater that may be present. The three (3) most common types of sewage are:
- a. *Sanitary sewage.* The combination of liquid and water-carried wastes discharged from toilet and other sanitary plumbing facilities.
 - b. *Industrial sewage.* A combination of liquid and water-carried wastes, discharged from industrial establishment, and resulting from any trade or process carried on in that establishment, including wastes from pretreatment facilities and polluted cooling water.
 - c. *Combined sewage.* Wastes including sanitary sewage, industrial sewage, stormwater, infiltration and inflow carried to the wastewater treatment facilities by a combined sewer.
- (39) *Sewer.* A pipe or conduit for carrying sewage.
- (40) *Shall* is mandatory; *may* is permissive.
- (41) *Significant industry.* Any industry that will contribute greater than ten (10) per cent of the design flow and/or design pollutant loading of the wastewater treatment system.
- (42)

Slug. Any discharge of water or wastewater 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-hour concentration or flow during normal operation.

- (43) *Standard methods.* The laboratory procedures set forth in the latest edition, at the time of analysis, of "Standard Methods for the examination of Water and Wastewater" prepared and published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation.
- (44) *Storm sewer.* A sewer that carries storm, surface, and groundwater drainage but excludes and industrial wastes other than unpolluted cooling water.
- (45) *Superintendent.* The superintendents (administration and operations) of the Jacksonville Sewerage System, or their authorized deputy, agent or representative.
- (46) *Suspended solids.* The 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.
- (47) *Total solids.* The sum of suspended and dissolved solids.
- (48) *Toxic amount.* The concentration of any pollutant or combination of pollutants which upon exposure to or assimilation into any organism will cause adverse effects, such as cancer, genetic mutations, and physiological manifestations as defined in standards issued pursuant to the Federal Clean Water Act.
- (49) *Unpolluted water.* 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 benefitted by discharge to the sanitary sewers and wastewater treatment facilities provided. Effluent criteria are defined in the NPDES permit and water quality standards are defined in the Water Pollution Regulations of Illinois.
- (50) *Volatile organic matter.* The material in the sewage solids transformed to gases or vapors when heated at five hundred fifty (550) degrees centigrade for fifteen (15) to twenty (20) minutes.
- (51) *Wastewater charge.* A charge levied on users of wastewater treatment works for the cost of operation, maintenance and replacement of such works pursuant to section 204(b) of PL 92-500.
- (52) *Wastewater treatment system or sewage works.* The structures, equipment and processes required to collect, transport and treat domestic and industrial wastes and dispose of the effluent and accumulated residual solids.
- (53) *Water works or system.* All facilities for water supply, filtration plant, storage reservoirs, water lines and services and booster stations for obtaining, treating and distributing potable water.

(Ord. No. 97-O-52, § 1, 11-24-97)

Sec. 29-59. - Reserved.

ARTICLE IV. - PRIVATE WASTEWATER DISPOSAL^[3]

Sec. 29-60. - Regulations of private wastewater disposal.

- (a) *Privies, etc.* No person shall construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of wastewater except as hereinafter provided.
- (b) *Permission.* Before commencement of construction of a private sewage disposal system, the owner shall first obtain written permission from the authority. The applicant shall supplement an application supplemented by any plans, specifications, and other information deemed necessary by the authority.
- (c) *Permit effective.* A permit for a private sewage disposal system shall not become effective until the installation is completed to the satisfaction of the city inspectors. The city shall be allowed to inspect the work at any stage of construction, and, in any event, the applicant for the permit shall notify the city when the work is ready for final inspection, and before any underground portions are covered. The inspection shall be made within one working day of the receipt of written notice by the utility superintendent, operations.
- (d) *Private system.* The type, capacities, locations and layout of a private sewage disposal system shall comply with all recommendations of the State of Illinois Private Sewage Disposal Licensing Act and Code and with the State of Illinois Environmental Protection Agency. No permit shall be issued for any private wastewater disposal system employing subsurface soil absorption facilities where the area of the lot is less than seven thousand five hundred (7,500) square feet. No septic tank or cesspool shall be permitted to discharge to any natural outlet.
- (e) *County health department.* No statement contained in this section shall be construed to interfere with any additional requirements that may be imposed by the Illinois Department of Public Health.
- (f) *Nonavailability.* Where a public sewer is not available, the building sewer shall be connected to a private sewage disposal system complying with all requirements of this section. At such times as a public sewer becomes available to a property served by a private sewage disposal system, a direct connection shall be made to the public sewer in compliance with this ordinance, and any septic tanks, cesspools and similar private sewage disposal facilities shall be abandoned cleaned of sludge and filled with clean bank-run gravel or dirt. The owner of a private sewage disposal facility shall operate and maintain the facilities in a sanitary manner at all times, at no expense to the authority.

(Ord. No. 97-O-52, § 2, 11-24-97)

Secs. 29-61—29-69. - Reserved.

ARTICLE V. - BUILDING SEWERS AND CONNECTIONS^[4]

Sec. 29-70. - General regulations.

- (a) *Permit.* No 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 utility superintendent, operations. A building sewer permit will only be issued and a sewer connection shall only be allowed if the superintendent, operations of the municipal utility department determines that the downstream sewage facilities, including sewer, pump stations and wastewater treatment facilities, have sufficient reserve capacity to adequately and efficiently handle the additional anticipated waste load.
- (b) *Types of permits.* The property owner or his agent shall make written application to the Jacksonville Department of Inspections. The permit applications shall be supplemented by any plans, specifications or other information considered pertinent in the judgement of the authority.

All persons residing outside the city limits will make written application for sewer service addressed to the superintendent of utilities, administration. The city council shall determine in each instance if the connection will be permitted and, if permitted, what the connection fee shall be.

- (c) *Service.* Wastewater service shall be furnished only upon the filing of a written application with Jacksonville Municipal Utilities. The application shall include, but not be limited to, the name of applicant, the premises to be served, the size of the service desired, the date service is desired, and include a record of service installation, inspection and approval by the authority, and a record of water meter and sewer meter reading upon commencement of service to the applicant.
- (d) *Conditions for industries.* Any industry, as a condition of permit authorization, must provide information describing its wastewater constituents, characteristics, and type of activity. The superintendent of operations shall make a determination of contract customer status based on the provisions set forth in section 29-103 (m).
- (e) *Capacity for extensions.* No extension of the public sewer will be permitted if, in the opinion of the authority, the wastewater system does not have the necessary capacity to serve the proposed extension.
- (f) *Fees.* Unless otherwise covered by contract, at the time of filing a building sewer permit application, a connection fee shall be paid to the utilities superintendent of administration. There shall be a connection fee of seventy-five dollars (\$75.00).

(Ord. No. 97-O-52, § 3, 11-24-97; Ord. No. 2003-O-19, § 9, 8-11-03)

Sec. 29-71. - Notifications and inspections.

- (a) *Notice—Beginning work.* Notice must be given to the office of the superintendent, operations, one working day prior to the beginning of any work upon a sewer, and no materials shall be used or work covered until inspected and approved by the superintendent, operations.
- (b) *Notice—Readiness to connect.* The applicant for the building sewer shall notify the authority 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, operations.
- (c) *Notice—Prior to overfill.* Any person filling over sewer shall provide written notice of such action to the superintendent, operations, prior to commencement of the filling. Such written notice shall not absolve such person from any liability for damage to or collapse of the sewer as a result of such filling. Any manholes in such fill shall be brought to the grade of the fill to the satisfaction of the superintendent, operations, at the cost of the person doing the filling.
- (d) *Installer, qualifications.* The work of installing sewers performed pursuant to permit shall be done by skilled and responsible sewer builders and drain layers, approved by superintendent, operations.

(Ord. No. 97-O-52, § 3, 11-24-97)

Sec. 29-72. - Sewer backup and basement flooding.

Any building existing at the time of enactment of this section, which does not meet the provisions of this section, and which does experience sewer backup or basement flooding due to surcharge of the public sewer shall have installed suitable plugs, standpipes, backflow preventers, or other devices in each basement drain to protect against possible backup.

(Ord. No. 97-O-52, § 3, 11-24-97)

Sec. 29-73. - Drains.

No existing or new drain tile, foundation tile or other tile which could or does collect surface or subsurface water shall be maintained or constructed so as to permit or allow the flow therefrom to be drained, discharged or pumped into the sanitary sewer. There shall be no connection approved and made by the city of the building sewer to the sanitary sewer unless and until the superintendent, operations, shall determine that such drains are constructed and installed in accordance with this section.

(Ord. No. 97-O-52, § 3, 11-24-97)

Sec. 29-74. - Using old sewers.

Old sewers or any portion thereof may be used in connection with new buildings only when they are found, on examination and test by the superintendent, operations, to meet all requirements of this chapter and are adequate to serve the purposes of the new building and its use. Old sewer taps and the portion of the sewer under paved streets or alleys may be utilized even though they may not meet all requirements of this chapter, if they are found, on examination and test by the superintendent, operations, to be structurally satisfactory and adequate to protect against dangers giving rise to the specifications set by this section.

(Ord. No. 97-O-52, § 3, 11-24-97)

Sec. 29-75. - Installations.

- (a) *Installations etc.* The connection of the building sewer to the public sewer will not be allowed until the completion of the construction of the lowest level of the building floor. The footings and foundation also must be backfilled prior to connection to the public sewer. The applicant for wastewater service shall pay all costs and expenses incidental to the installation and connections of the building sewer, and the maintenance thereof, from the point of connection to the authority's public sewer to the premises of the applicant. The owner or the person installing the building sewer for said owner shall indemnify the authority from any loss or damage that may directly or indirectly be occasioned by said installations.
- (b) *Separate sewers.* A separate and independent building sewer shall be required for every building, except that multifamily dwelling units, including apartments and mobile home parks, may use single common building sewer for drainage of individual dwelling units with the approval of the utilities superintendent, operations.
- (c) *Sewer materials.* The building sewers and/or public sewers shall be constructed of ductile iron sewer pipe and fittings meeting the current A.S.T.M. "Specifications for Service Weight Cast Iron Soil Pipe", and A.S.T.M. "Specifications for Ductile Iron Gravity Sewer Pipe", and A.S.T.M. "Specifications for Ductile Iron Fittings"; or PVC sewer pipe or PVC composite sewer pipe and fittings meeting the current A.S.T.M. "Specifications for Poly Vinyl Chloride" (PVC) plastic pipe and fittings (Schedule 40) [building sewers and service laterals only], and A.S.T.M. "Specifications for PVC Composite Sewer Piping" [public sewers only]; or reinforced concrete pipe (RCP) meeting the current A.S.T.M. "Specification for Reinforced Concrete Sewer Pipe." If installed in filled or unstable ground, the building sewer and/or public sewers shall be ductile iron sewer pipe or reinforced concrete pipe, except that vitrified clay pipe or PVC sewer pipe meeting the above specification requirements may be accepted if laid on a suitable improved bed or cradle as approved by the inspector.

All building sewers within ten (10) feet of a water service pipe shall be cast iron soil pipe A.S.T.M. specification (A74-42).

- (d) *Joints and connections.* All joint and connections shall be made gas-tight and water-tight.

Joints for SV cast iron pipe shall be as described below for ductile iron sewer pipe.

Joints for ductile iron sewer pipe shall be "mechanical joint" or "push-on joint" to assemble a push-on joint the following method is to be used unless the manufacturer specifically recommends another method. After placing a length of pipe in the trench, the spigot end shall be centered in the bell and the pipe forced home and brought to correct line and grade. The pipe shall be secured in place with approved backfill material tamped under it except at the bells.

To assemble a mechanical joint, the following method is to be used, unless the manufacturer specifically recommends another method. Wash thoroughly with soapy water the pipe socket (or bell) plain end (or spigot) and the rubber gasket. Place gland followed by gasket over the plain end of the pipe. Insert in socket. Push the gasket into position, making sure that it is evenly seated in the socket of the pipe bell. Move the gland into position against the face of the rubber gasket, insert bolts and make finger-tight. Tighten bolts alternately, that is, tighten a bottom bolt, then a top bolt and so on all around the joint until tight.

Joints for PVC sewer pipe shall be "electromeric gasket joints" or "solvent cement joints". A solvent-cemented joint is one in which pipe solvent cements into a coupling to form the joint closure. Insure that surfaces to be joined are clean and dry. Liberally apply solvent to pipe end and inside of coupling. Shove pipe home, set pipe to line and grade.

The elastomeric gasket joint is a sliding assembly in which the lubricated pipe spigot end slides under the rubber ring and into the bell. Make certain the bell and rubber ring are clean. Make sure the pipe spigot end is clean. Lubricate the spigot end of the pipe. Be sure to cover the entire spigot end circumference. Insert the spigot end into the bell so that it is in contact with the rubber ring. Keep the pipe lengths in proper alignment. Brace the bell while the spigot end is pushed in under the rubber ring, so that previously completed joints will not be closed up. Push the spigot into the bell until the reference mark on the pipe barrel is flush with the end of the bell.

Joints for RCP sewer pipe shall be "rubber gasket joint" construction. Immediately before making a joint, lubricate entire gasket and inside of bell of last pipe and spigot end of pipe with an approved vegetable lubricant. Take care that gasket and ends of pipe are clean and free of sand and gravel. Introduce spigot of pipe being laid with gasket in place, into bell end of previously laid pipe. Set pipe to line and grade, and then jack or push completely home.

(e) *Size of sewers.* The size of building sewers shall be subject to the approval of the authority, but in no event shall the diameter be less than four (4) inches. The slope of such four-inch pipe shall not be less than one-eighth (1/8) inch per foot. A slope of one-fourth (1/4) inch per foot shall be used wherever practical. Any sewer laid longitudinally in public streets, alleys or easements, which could connect more than one

building sewer, shall not be less than eight (8) inches in diameter, shall be laid on a minimum grade of four (4) feet per thousand feet and shall be constructed to a maximum depth to permit further extension thereto. Sewers installed longitudinally in a public street, alley or easement shall be constructed in accordance with plans and specifications prepared by a registered professional engineer and approved by the superintendent, operations.

- (f) *Excavations.* All sewer excavations in public streets and alleys shall be properly braced and sheeted so as to prevent any sloughing or caving, and when the work is finished, the excavation shall be backfilled with sand, so that there will be no after settlement of the street or alley surface.
- (g) *Sewer elevations.* The building sewer shall be brought to the building at an elevation sufficient to afford protection from frost. All excavations required for the installation of a building sewer shall be open trench work unless otherwise approved by the inspector. Pipe laying and backfill shall be performed in accordance with current A.S.T.M. Specifications except that no backfill shall be placed until the work has been inspected by the inspector or his representative.
- (h) *Gravity flows.* In all buildings in which any building drain is too low to permit gravity flow to the public sanitary sewer, sanitary wastewater carried by such building drains shall be lifted by approved artificial means and discharged to the building sewer. No water operated sewage ejector shall be used.
- (i) *Unauthorized use.* 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, or combined sewer.
- (j) *Branches.* The connection of building sewer into the public sewer shall be made at a "Y" branch or "T" branch, if such a branch is available at a suitable location. If the public sewer has no properly located "Y" or "T" branch available, the city shall install a "Y" or "T" branch or a "Y" or "T" saddle fitting (for PVC composite sewer) at the location specified by the inspector. Under no circumstances will the sewer service protrude into the sewer main to which the connection is made. The invert of the building sewer at the point of connection shall be at the same or at a higher elevation than the invert of the public sewer. A smooth, neat, joint shall be made and the connection made secure and water-tight by encasement in concrete. Special fittings may be used for the connections only when approved by the inspector. Manholes shall be constructed at any junction of an eight-inch diameter sewer pipe or larger into a public sewer. Building sewer connection into manholes shall be subject to the approval of the inspector.
- (k) *Barricades, etc. and repairs.* All excavations for building sewer installation shall be adequately guarded with barricades and lights, together with such additional precautions as may be necessary for the reasonable protection of the public from hazard. Streets, sidewalk, parkways, utility lines and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the authority at the expense of the applicant.

- (l) *Extensions.* The authority must approve all plans and specifications for any public sewer extensions. Before any public sewer extensions are installed, the plans and specifications must be reviewed and approved by the Illinois Environmental Protection Agency.
- (m) *Rights-of-way.* Ownership rights-of-way and title must be conveyed to the authority for all public sewer extensions installed by anyone other than the authority. The authority shall maintain the extended public sewers thereafter.

(Ord. No. 97-O-52, § 3, 11-24-97)

Secs. 29-76—29-79. - Reserved.

ARTICLE VI. - PENALTIES^[5]

Sec. 29-80. - Protection from damages and penalties.

- (a) *Disorderly conduct.* No 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 wastewater treatment system of the authority. Any person violating this provision shall be subject to immediate arrest under the charge of disorderly conduct.
- (b) *Notice.* Any person found to be violating any provision of this chapter shall be served by the authority 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. The city may revoke any permit or cancel any contract or agreement for wastewater treat or disposal as a result of any violation of any provision of this chapter.
- (c) *Misdemeanor.* Any person shall continue any violation beyond the time limit provided for in this chapter shall be guilty of a misdemeanor and, upon conviction thereof, shall be fined in an amount not less than fifty dollars (\$50.00) and not more than five hundred dollars (\$500.00) for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.
- (d) *Damages.* Any person violating any of the provisions of this chapter shall become liable to the authority for any expense, loss or damaged occasioned the authority by reason of such violation. Should there be an exceedance of the limitations set forth in this chapter which causes the city to incur additional costs for operation, maintenance, replacement or fines and penalties imposed by any court or state or federal agency, the person shall pay the city twice the amount of any such costs for operation, maintenance, replacement, fine or penalty.

(Ord. No. 97-O-52, § 4, 11-24-97)

Sec. 29-81. - Power and authority of inspectors.

- (a) *Inspections.* The authority and other duly authorized employees of the authority, the Illinois Environmental Protection Agency, bearing proper credentials and identifications, shall be permitted to enter all properties for the purposes of inspections, observation, measurement, sampling, and testing of waste streams in accordance with the provisions of this chapter. The authority or its representative 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 waterway or facilities for waste treatment.
- (b) *Safety and indemnity.* While performing the necessary work on private properties the authority or duly authorized employees of the authority, the Illinois Environmental Protection Agency, and the U.S. Environmental Protection Agency shall observe all safety rules applicable to the premises established by the person and the person shall be held harmless for injury or death to the authority employees and the authority shall indemnify the person against loss or damage to its property by authority employees and against liability claims and demands for personal injury or property damage asserted against the person and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the person to maintain safe conditions as required by this chapter.
- (c) *Access.* The authority and other duly authorized employees of the authority bearing proper credentials and identification shall be permitted to enter all private properties through which the authority holds a duty 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. No. 97-O-52, § 3, 11-24-97)

Secs. 29-82—29-99. - Reserved.