

Section 305 – Public Sewers, Industrial Wastes

Section 305:00. Definitions. The meaning of terms used in this ordinance shall be as follows:

Subd. 1. “City” shall mean the City of Foley, Minnesota, or any authorized person acting in its behalf.

Subd. 2. “Person” shall mean any and all persons, natural or artificial, including any individual, firm, company, municipal or private organization, association, governmental agency or other entente and agents, servants or employees.

Subd. 3. “Approving Authority” shall mean the city council of the City of Foley or its duly authorized agent, or representative.

Subd. 4. “Sewage” shall mean a combination of the water-carried waste from residences, business buildings, institutions and industrial establishments, together with such ground surface and storm water as may be present.

Subd. 5. “Domestic Sewage” shall mean water-borne wastes normally discharging into the sanitary conveniences of dwellings (including apartment houses and hotels), office buildings, factories and institutions, free of storm surface water and industrial wastes.

Subd. 6. “Normal” domestic sewage shall mean normal sewage for the City of Foley in which the average concentration of suspended materials and a 5-day B.O.D. is established at 300 parts per million each, by weight, on the basis of the normal daily contribution of seventeen hundredths (0.17) pounds per capita per 100 gallons.

Subd. 7. “Garbage” shall mean solid wastes and residue from the preparation, cooking and dispensing of food, and from the handling, storage and sale of food products and produce.

Subd. 8. “Properly Shredded Garbage” shall mean the wastes from the preparation, cooking and dispensing of food that have been shredded to such degree that all particles shall be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than 1/2 inch in any dimension.

Subd. 9. “Sewer” shall mean a pipe or conduit for carrying sanitary sewage.

Subd. 10. “Public Sewer” shall mean a sewer in which all owners of abutting properties shall have equal rights and interest controlled by public authority.

Subd. 11. "Sanitary Sewer" shall mean a sewer that conveys sewage or industrial wastes or a combination of both, and into which storm, surface and ground waters or unpolluted industrial wastes are not intentionally passed.

Subd. 12. "Storm Sewer or Storm Drain" shall mean a sewer which carries storm and surface waters and drainage but excludes sewage and polluted industrial wastes.

Subd. 13. "Sewerage Works" shall mean all facilities for collecting, pumping, treating and disposing of sewage and industrial wastes and would include sewage, as well as the sewage treatment facilities.

Subd. 14. "Collection System" shall mean the system of sewers and appurtenances for the collection, transportation and pumping of sewage and industrial wastes.

Subd. 15. "Sewage Treatment Facilities" shall mean any city owned facility, devices and structures used for receiving and treating sewage from the city sanitary sewer system.

Subd. 16. "pH" shall mean the logarithm (base 10) of the reciprocal of the hydrogen ion concentration expressed in moles per liter. It shall be determined by one of the procedures outlined in "Standard Methods."

Subd. 17. "B.O.D." shall mean the quantity of oxygen expressed in parts per million by weight, utilized in the bio-chemical oxidation of organic matter under standard laboratory conditions for five days at a temperature of 20 degrees Centigrade. The laboratory determinations shall be made in accordance with procedures set forth in "Standard Methods."

Subd. 18. "Suspended Solids" shall mean solids that either float on the surface of, or are in suspension in water, sewage, or other liquids, and which are removable by a laboratory filtration device. Quantitative determination of suspended solids shall be made in accordance with procedures set forth in "Standard Methods."

Subd. 19. "Unpolluted Water or Waste" shall mean water or waste containing none of the following: free of emulsified grease or oil; acids or alkalis; phenols or other substances imparting taste and odor in receiving water; toxic or poisonous substances in suspension; colloidal state or solution and noxious or otherwise obnoxious odorous gases. It shall contain not more than 10 parts per million each of suspended solids and B.O.D. The color shall not exceed fifty parts per million.

Subd. 20. "Standard Methods" shall mean the examination and analytical procedures set forth in the latest Edition at the time of analysis of "Standard Methods for the Examination of Water and Sewage" as prepared, approved and published jointly by the American Public Health Association and the Water Pollution Control Federation.

Subd. 21. “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 to the building sewer, beginning three feet outside the inner face of the building wall.

Subd. 22. “Building Sewer” shall mean the extension from the building drain to the sewer or other place of disposal.

Subd. 23. “Natural Outlet” shall mean any outlet into a watercourse, pond, ditch, lake or other body of surface or ground water.

Subd. 24. “Watercourse” shall mean a channel in which a flow of water occurs, either continuously or intermittently.

Subd. 25. “Parts per Million” shall mean a weight-to-weight ratio; the parts-per-million value multiplied by the factor 8.345 shall be equivalent to pounds per million gallons of water.

Subd. 26. “Industrial Service Charge” shall mean the charge made to users of the public sewer system whose wastes exceed in strength the concentration values established as representative of normal sewage or exceed 20,000 gallons in average daily flow.

Subd. 27. “Storm Water Runoff” shall mean that portion of the rain fall that is drained into the sewers.

Subd. 28. “Industrial Waste” shall mean water-borne solids, liquids or gaseous wastes resulting from and discharged, permitted to flow or escaping from any industrial, manufacturing or food processing operation or process or from the development of any natural resource, or any mixture of these with water or domestic sewage as distinct from normal domestic sewage.

Subd. 29. “Operation and Maintenance Cost” shall mean annual expenditures made by the city in the operation and maintenance of its sewage treatment facilities, consisting of and limited to the sums spent for each and all of the following purposes for the twelve month period prior to computing the industrial service charge:

- a. Wages and salaries of operating, maintenance and supervisory personnel, together with premiums paid on such wages and salaries for State of Minnesota workmen’s compensation coverage and other insurance benefits normally paid by the city.
- b. Actual sums paid for electricity for light and power used for sewage collection and treatment facilities.

- c. Actual sums paid for chemicals, fuel and other operating supplies.
- d. Actual sums paid for repairs to and maintenance of sewage treatment facilities and the equipment associated therewith.
- e. Actual sums paid as premiums for hazard insurance carried on sewerage works.
- f. Actual sums paid as premiums for insurance providing coverage against liability imposed by law for the injury to persons and/or property (including death) of any person or persons resulting from the use and maintenance of said sewerage works.

Section 305:02. Admission of Industrial Wastes into the Public Sewers.

Subd. 1. Approval Required. Review and acceptance of the approving authority shall be obtained prior to the discharge into the public sewers of any wastes and waters having:

- a. A 5-day 20 degrees Centigrade biochemical-oxygen-demand (B.O.D.) greater than 300 ppm.
- b. Suspended solids containing greater than 300 ppm.

Subd. 2. Pre-treatment. Where required, in the opinion of the approving authority, to modify or eliminate wastes that are harmful to the structures, processes or operation of the sewage disposal works, the person shall provide, at his expense, such preliminary treatment or processing facilities as may be determined necessary to render his wastes acceptable for admission to the public sewers.

Subd. 3. Grease, Oil and Sand Interceptors. Grease, oil and sand interceptors shall be provided for the proper handling of liquid wastes containing grease in excessive amounts or any flammable wastes, sand and other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwellings. All interceptors shall be of a type and capacity approved by the approving authority and shall be located as to be readily and easily accessible for easy cleaning and inspection. Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight and equipped with easily removable covers which, when bolted in place, shall be gastight and watertight. Where installed all grease, oil and sand interceptors shall be maintained by the owner, at his expense, in continuously efficient operation at all times.

Subd. 4. Submission of Information. Plans, specifications and any other pertinent information relating to proposed preliminary treatment or processing facilities shall be submitted for approval of the approving authority prior to the start of their construction, if the effluent from such facilities is to be discharged into the public sewers.

Section 305:04. Prohibitive Discharges. No person shall discharge or cause to be discharged any storm water, ground water, roof run-off, sub-surface drainage, down spouts, yard drains, yard fountain and ponds or lawn sprays into any sanitary sewer. Storm water 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 approving authority. Unpolluted processed water may be discharged upon prior written approval of the approving authority to a storm sewer or natural outlet or into the sanitary sewer system by an indirect connection whereby such discharge is cooled, if required, and flows into the sanitary sewer at a rate not in excess of three gallons per minute, provided the waste does not contain materials or substances in suspension or solution in violation of the limits prescribed by this Section.

In cases where, and in the opinion of the approving authority, the character of the sewage from any manufacturer of industrial plant building or other premises is such that it will damage the system or cannot be treated satisfactorily in the system, the approving authority shall have the right to require such user to dispose of such waste otherwise and prevent it from entering the system.

No person shall discharge or cause to be discharged either directly or indirectly any of the following described substances, materials, waters or waste:

- (1) Any liquid having a temperature higher than 150 degrees Fahrenheit (65 degrees Centigrade).
- (2) Any water or wastes which contain wax, grease or oil, plastic or other substance that will solidify or become discernibly viscous at temperatures between 32 degrees to 150 degrees Fahrenheit.
- (3) Any solids, liquids or gases which by themselves or by interaction with other substances may cause fire or explosion hazards, or in any other way be injurious to persons, property, or the operator of the sewage disposal works.
- (4) Any solids, slurries or viscous substances of such character as to be capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the sewage works, such as ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, whole blood, paunch manure, hair and fleshlings, entrails, lime slurry, lime residues, chemical residues, paint residues, or bulk solids.
- (5) Any garbage that has not been properly comminuted or shredded. If properly comminuted or shredded, then it may be accepted under provisions established in Section 305:00.
- (6) Any noxious or malodorous substance, which either singly or by interaction with other substances is capable of causing objectionable odors, or hazard to life; or forms solids in concentrations exceeding limits established in Section 305:02 or creates any other condition deleterious to structures or treatment processes; or requires unusual provisions, alteration, or expense to handle such materials.

- (7) Any waters or wastes having a pH lower than 5.5 or higher than 10.5 or having any corrosive property capable of causing damage or hazards to structures, equipment or personnel.
- (8) Any wastes or waters containing suspended or dissolved solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment facilities.
- (9) Any waters or wastes containing a toxic or poisonous substance such as plating or heat treating wastes in sufficient quantity to injure or interfere with any sewage treatment process, to constitute a hazard to humans or animals, or to create any hazard in the receiving waters of the sewage treatment facilities.
- (10) Any cyanide greater than 1.0 part per million, as CN.
- (11) Any hexavalent chromium greater than 1.0 part per million.
- (12) Any trivalent chromium greater than 10 parts per million.
- (13) Any copper greater than 1.0 part per million.
- (14) Any nickel greater than 1.0 part per million.
- (15) Any cadmium greater than 1.0 part per million.
- (16) Any zinc greater than 1.0 part per million.
- (17) Any phenols greater than 12 parts per million.
- (18) Any iron greater than 5 parts per million.
- (19) Any tin greater than 1.0 parts per million.
- (20) Any radioactive wastes greater than allowable releases as specified by current United States Bureau of Standards Handbooks dealing with the handling and release of radioactivity.

Except in quantities, or concentrations, or with provisions as stipulated herein, it shall be unlawful for any person corporation or individual to discharge waters or wastes to the sanitary sewer containing:

- (1) Free or emulsified oil and grease exceeding on analysis an average of 100 parts per million (833 pounds per million gallons) of either or both of combinations of free or emulsified oil and grease, if, in the opinion of the approving authority, it appears probable that such wastes:
 - a. Can deposit grease or oil in the sewer lines in such manner to clog the sewers.
 - b. Are not amenable to bacterial action and will therefore pass to the receiving waters without being affected by normal sewage treatment processes, or
 - c. Can have deleterious effects on the treatment process due to the excessive quantities.
- (2) Cyanides or cyanogen compounds capable of liberating hydrocyanic gas on acidification in excess of one-half (0.5) part per million by weight as CN in the wastes from any outlet into the public sewers.

- (3) Materials which exert or cause:
- a. unusual concentrations of solids or composition; as for example, in total suspended solids of inert nature (such as Fuller's Earth) and/or in total dissolved solids (such as sodium chloride, or sodium sulfate),
 - b. excessive discoloration,
 - c. unusual biochemical oxygen demand or an immediate oxygen demand,
 - d. high hydrogen sulfide content, or
 - e. unusual flow and concentration shall be pretreated to a concentration acceptable to the city, if such wastes can (i) cause damage to collection facilities, (ii) impair the processes, (iii) incur treatment cost exceeding those of normal sewage, or (iv) render the water unfit for stream disposal or industrial use. Where discharge of such wastes to the sanitary sewer are not properly pretreated or otherwise corrected the approving authority may (i) reject the wastes or terminate the service of water and/or sanitary sewer, (ii) require control of the quantities and rates of discharge of such wastes, or (iii) require payment of surcharges for excessive cost for treatment provided such wastes are amenable to treatment by normal sewage plant facilities operated by the city.

Section 305:06. Control of Admissible Wastes. Within 120 days after passage of this ordinance, any person desiring to deposit or discharge any industrial waste mixture into the sewers or sewer works of the city or any sewer connected therewith, or who is now so doing, shall make written application to the approving authority for a permit therefor.

Subd. 1. Control Chambers. Within six months from the date of passage of this ordinance any person discharging or desiring to discharge an industrial waste mixture into the sewers or sewer works of the city, or any sewer connected therewith, shall provide and maintain in a suitable accessible position on his premises, or such premises occupied by him, an inspection chamber or manhole near the outlet of each sewer, drain, pipe, channel or connection which communicates with any sewer or sewer works of the city or any sewer connected therewith. Each such manhole or inspection chamber shall be of such design and construction which will prevent infiltration by ground and surface waters or introduction of slugs of solids by installation of screens with maximum openings of one inch but of sufficient fineness to prevent the entrance of objectionable slugs of solids to the sanitary sewage system and shall be so maintained by persons discharging wastes so that any authorized representative or employee of the city may readily and safely measure the volume and obtain samples of the flow at all times. Plans for the construction of control manholes or inspection chambers, including such flow measuring devices as may or may not be required, shall be approved by the approving authority prior to the beginning of construction.

Subd. 2. Measurement of Flow. The water consumption during the previous year, as determined from the meter records of the Water Department, shall be the valid basis for computing the sewage flow, unless actual sewage flow is measured by a recording meter of a type approved by the approving authority. The owner shall install and maintain such device in proper condition to accurately measure such flow. Upon failure to do so, the water consumption shall be the basis for determining the applicability of this ordinance and computing the industrial service charge.

When water is contained in a product or is evaporated or is discharged as polluted waste in an uncontaminated condition to surface drainage, an application may be made for a reduction in the volume of waste discharge to the public sewer, provided supporting data satisfactory to the approving authority is furnished. This data shall include a flow diagram, destination of water supply and/or waste, supported by sub-metering data installed on such process piping at the expense of the private owner.

Subd. 3. Sampling of Wastes. Sampling of the effluent of waste discharges may be accomplished manually or by the use of mechanical equipment to obtain a twenty-four (24) hour composite sample which would be representative of the total effluent. Samples shall be taken at intervals to be established by the contractual agreement between the owner and the approving authority, or at such intervals as determined by the approving authority as necessary to maintain a control over the discharges from the establishment. The method used in the examination of all bacteriological wastes to determine suspended solids, B.O.D. and prohibited wastes shall be those set forth in Section 305:00.

Section 305:08. Powers and Authority of Enforcing Agents. The approving authority shall be permitted to gain access to such properties as may be necessary for the purpose of inspection, observation, measurement, sampling and testing, in accordance with provisions of these regulations. Any person found to be violating any provision of this ordinance 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. Any person who shall continue any violation beyond the time limit shall be disconnected from the sanitary sewer and/or water service after notice and hearing thereon. Such disconnection and any reconnection would be at the total expense of the customer.

Where acids and chemicals damaging the sewer lines or treatment processes are released to the sewer causing rapid deterioration of these structures or interfering with proper treatment of sewage, the approving authority is authorized to immediately terminate services by such measures as are necessary to protect the facilities.

Any person, firm or corporation violating any of the provisions of this ordinance shall be guilty of a misdemeanor and, upon conviction, shall suffer the appropriate penalty, as set forth in the ordinances of the City of Foley. Each day of each such violation shall be deemed a separate offense. Any person violating any of the provisions of this ordinance shall become liable to the City of any expense, loss or damage occasioned by the City by reason of such violation.

Section 305:10. Protection from Damage. No unauthorized person shall maliciously, willfully or negligibly break, damage, uncover, deface or tamper with any structure, appurtenance or equipment which is part of the municipal sewerage works. Any person violating this provision shall be subject to immediate arrest.

Section 305:12. Industrial Waste Charges. Persons or owners discharging wastes prohibited in Section 305:04, other than excessive B.O.D., or suspended solids, but having a concentration for a duration of fifteen (15) minutes greater than four (4) times that of "normal" sewage as measured by suspended solids and bio-chemical oxygen demand (B.O.D.) and/or a concentration during a twenty-four (24) hour period average of suspended solids or B.O.D. content in excess of "normal" domestic sewage or having a total wastewater flow in excess of 20,000 gallons during a twenty-four (24) hour period shall be charged on the basis of the following components:

- (1) Operation and Maintenance Charge. As its proportionate share of the expenses incurred by the city in the operation and maintenance of the city disposal facilities, the persons will pay to the city a monthly sum equal to the total of the two sums computed by the application of the following formulas and sampling procedures established by Section 305:06.
 - a. Persons total annual pounds B.O.D. divided by the total annual pounds B.O.D. at the city sewage treatment facilities; the result so obtained to be multiplied by O & M cost of the sewage treatment facilities, and the result so obtained multiplied by one-twenty fourth (1/24th).
 - b. Persons total annual gallons of sewage divided by the total annual gallons of sewage at the city sewage treatment facilities; the result so obtained to be multiplied by O & M cost of the city sewage treatment facilities and the result so obtained multiplied by one-twenty-fourth (1/24th).
- (2) Capital Contributions. As a capital contribution the person shall pay a monthly basis for a period not to exceed fifteen (15) years, a sum computed by the application of the following formula:

Persons total annual gallons of sewage divided by the total annual gallons of sewage at the city sewage treatment facilities, the result so obtained to be multiplied by \$5,754.00. (\$5,754.00 represents the annual rate of amortization of the city's investment to date in the sewage treatment facilities.) The amount so determined will be divided by twelve (12) to determine the monthly capital contribution.

- (3) Sewer Use Charge. For the use, maintenance, repair, reconstruction, change or alteration of the city sewers, the person shall pay an amount equal to five (5) percent of the monthly charge based upon the sum of the contributions to amortization of capital investments and operation and maintenance of city treatment facilities.
- (4) Participation in Future Construction Costs. The annual rate of capital cost amortization for all improvements necessary to increase the degree of treatment of the sewage at the city sewage treatment facilities, where such improvements are required to meet standards of effluent quality and purity established by the Minnesota Pollution Control Agency, will be apportioned as established in Section 305:12(2) and extend for a period not to exceed the amortization period of such improvements.

Section 305:14. Billing, Penalties.

Subd. 1. Billing Practice. Industrial waste charges provided for in this ordinance shall be included as a separate item on the regular bill for water and shall be paid quarterly in accordance with the existing practices. Charges shall be paid at the same time that the water charges of the person become due and payment for water services shall not be accepted without payment also of the sewer service charge.

Subd. 2. Penalty for Failure to Pay Bills. Failure to pay quarterly bills for the established sewer charge for industrial waste when due or repeated discharge of prohibited waste to the sanitary sewer shall be sufficient cause to disconnect any and all services to the water and/or sanitary sewer mains of the City of Foley after notice and hearing thereon and the same penalties and charges now or hereafter provided for by the ordinances of the City of Foley for failure to pay the bill for water service when due shall be applicable in like manner in case of failure to pay the established charge for industrial waste discharged to the sanitary sewer mains as established in Section 305:12.