

CITY OF ROSE CREEK, MINNESOTA

INDUSTRIAL WASTES ORDINANCE

ORDINANCE NO. 53

AN ORDINANCE COVERING THE DISCHARGE OF INDUSTRIAL WASTES INTO THE PUBLIC SEWERS OF THE CITY OF ROSE CREEK, PROMULGATING REGULATIONS AND ESTABLISHING CHARGES FOR SERVICES RENDERED

WHEREAS, the City of Rose Creek has provided facilities for the collection and treatment of wastewater to promote the health, safety and convenience of its people and for the safeguarding of water resources common to all, and

WHEREAS, provision must be made in the design, construction, and operation of such facilities to accomodate certain types and quantities of industrial wastes in excess of, and in addition to, normal domestic wastewater, and

WHEREAS, it is the obligation of the producers of industrial wastes to pay the costs of extra services rendered by the City of Rose Creek in an equitable manner and, insofar as it is practicable, in proportion to benefits derived, and

WHEREAS, proper protection and operation of the collection and treatment facilities may require either the exclusion, pretreatment, or controlled discharge at the point of origin of certain types or quantities of industrial wastes,

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ROSE CREEK, MINNESOTA:

ARTICLE I.

Definition of Terms:

The meaning of terms used in this Ordinance shall be as follows:

(1) "Approving Authority" shall mean the City Council of the City of Rose Creek or by its duly authorized agent, or representative.

(2) "BOD" 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 5 days at a temperature of 20 degrees centigrade. The laboratory determinations shall be made in accordance with procedures set forth in "Standard Methods".

(3) "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 three feet outside the inner face of the building wall.

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

(5) "Capital Cost" shall mean the total cost to the City of Rose Creek exclusive of grants that do not have to be repaid, incurred in the construction of wastewater facilities, consisting of but not limited to the sums spent for the following purposes:

- a. Actual sums paid for construction of wastewater treatment facilities.
- b. Actual engineering fees paid for preliminary engineering studies, plans and specifications, supervision during construction, construction staking, operation and maintenance manuals, and initial operator training.
- c. Actual sums paid for soils investigations, wastewater sampling, and materials testing required for such construction.
- d. Actual fees and wages paid for legal, administrative, and fiscal services required by construction of wastewater treatment facilities.
- e. Actual interest paid on the total amount financed by debt obligation for construction of wastewater treatment facilities.

(6) "Collection System" shall mean the system of sewers and appurtenances for the collection, transportation and pumping of wastewater and industrial wastes

(7) "Domestic Wastewater" shall mean water-borne wastes normally discharged into the sanitary conveniences of dwellings (including apartment houses and hotels), office buildings, factories and institutions, free of storm, surface water, and industrial wastes.

(8) "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.

(9) "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 5,000 gallons in average daily flow.

(10) "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 wastewater as distinct from normal domestic wastewater.

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

(12) "Normal Domestic Wastewater" shall mean normal wastewater for the City of Rose Creek in which the average concentration of suspended materials and 5-day BOD is established at 240 parts per million each, by weight.

(13) "Operation and Maintenance Cost" shall mean annual expenditures made by the City in the operation and maintenance of its wastewater treatment facilities, consisting of but not limited to the sums spent for each and all of the following purposes for the twelve-month period of record 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.
- b. Actual sums paid for electricity for light and power used for wastewater 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 wastewater 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.

(14) "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. Parts per millions and milligrams per liter (mg/l) shall be synonymous terms.

(15) "Person" shall mean any and all persons, natural or artificial, including any individual, firm, company, association, governmental unit or group.

(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".

(17) "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 shall be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch in any dimension.

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

(19) "Sanitary Sewer" shall mean a sewer that conveys wastewater or industrial wastes or a combination of both, and into which storm, surface and groundwaters or unpolluted industrial wastes are not intentionally passed.

(20) "Sewer" shall mean a pipe or conduit for carrying wastewater.

(21) "Sewerage Works" shall mean all facilities for collecting, pumping, treating and disposing of wastewater and industrial wastes.

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

(23) "Storm Sewer or Storm Drain" shall mean a sewer which carries storm and surface waters and drainage but excludes wastewater and polluted industrial wastes.

(24) "Storm Water Runoff" shall mean that portion of the rainfall that is drained into the sewers.

(25) "Suspended Solids" shall mean solids that either float on the surface of, or are in suspension in water, wastewater, 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".

(26) "Unpolluted Water or Waste" shall mean water or waste containing none of the following: 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 five parts per million each of suspended solids and BOD. The color shall not exceed fifty units under procedures set forth in "Standard Methods".

(27) "City" shall mean the City of Rose Creek, Minnesota, or any authorized person acting in its behalf.

(28) "Wastewater" shall mean a combination of the water-borne waste from residences, business buildings, institutions and industrial establishments, together with such ground, surface, and storm water as may be present.

(29) "Wastewater Treatment Facilities" shall mean any City owned facilities, devices, and structures used for receiving and treating wastewater from the City sanitary sewer system.

(30) "Watercourse" shall mean a channel in which a flow of water occurs, either continuously or intermittently.

ARTICLE II.

Admission of Industrial Wastes into the Public Sewers

Section 2.01. 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 one or more of the following characteristics:

- a. A 5-day, 20 degrees centigrade, biochemical-oxygen-demand (BOD) greater than 240 ppm.
- b. A suspended solids concentration greater than 240 ppm.
- c. A volume greater than 5,000 gallons per day.

A special agreement or contract for service may be executed when such an agreement is deemed appropriate by either the City or industry requesting service. Such agreements shall be in accordance with all sewer use ordinances and rate structures.

Section 2.02 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 wastewater treatment facilities, 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.

Where discharge of such wastes to the sanitary sewer are not properly pretreated or otherwise modified, the Approving Authority may (a) reject the wastes or terminate the service of water and/or sanitary sewer, (b) require control of the quantities and rates of discharge of such wastes, or (c) require payment of surcharges for excessive cost for treatment provided such wastes are amendable to treatment by the normal wastewater treatment facilities operated by the City. The amount of surcharge shall be computed as twice the actual incremental costs (above normal costs for labor, power, equipment rental, milage, etc.) experienced by the City for handling the improperly pretreated wastewater. See Article VII for method of computing normal industrial waste charges.

Section 2.03 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. All grease, oil and sand interceptors shall be maintained by the owner, at his expense, in continuously efficient operation at all times.

Section 2.04 Submission of Information - Plans, specifications and any other pertinent information relating to proposed preliminary treatment or processing facilities shall be submitted for approval by the Approving Authority prior to the start of their construction, if the effluent from such facilities is to be discharged into the public sewers.

ARTICLE III.

Prohibitive Discharges

No person shall discharge or cause to be discharged any storm water, ground water, roof runoff, sub-surface drainage, downspouts, yard drains, yard fountain and ponds or lawn sprays into any sanitary sewer. Storm water and all other unpolluted drainage shall be discharged into such sewers as are specifically designated as storm sewers or to a natural outlet approved by the Approving Authority.

In cases where, and in the opinion of the Approving Authority, the character of the wastewater from any manufacturer or 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 wastes otherwise and prevent it from entering the City 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 wastewater treatment facilities.

(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 wastewater treatment facilities, such as ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, whole blood, paunch manure, hair and fleshings, 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 Article I.

(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 Article II 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 in the wastewater collection and treatment facilities.

(9) Any waters or wastes containing a toxic or poisonous substance such plating or heat treating wastes in sufficient quantity to injure or interfere with any wastewater treatment process, to constitute a hazard to humans or animals, or to create any hazard in the receiving waters of the wastewater 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 part 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 radioactive materials.

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 into the sanitary sewer containing:

1. Free or emulsified oil and grease exceeding on analysis an average of 100 parts per million (834 pounds per million gallons) of either or both, or 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 wastewater treatment processes, or,
- (c) Can have deleterious effects on the treatment process.

2. 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 unusual immediate oxygen demand,
- (d) High hydrogen sulfide content.

ARTICLE IV.

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 of the City or any sewer connected therewith, shall make written application to the Approving Authority.

Section 4.01. 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 sewerage 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 sewerage works of the City or any sewer connected therewith. Each such manhole or inspection chamber shall be of such design and constructed as to prevent infiltration by ground and/or surface waters or introduction of slugs of solids by installation of screens with maximum openings of one-half inch to prevent the entrance of objectional slugs of solids into the sanitary waste water 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 be required, shall be approved by the Approving Authority prior to the beginning of construction. Such structures and equipment shall be installed by the person at his expense.

Section 4.02 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 wastewater flow, unless actual wastewater flow measurement by a recording meter of an approved type is required 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 in an uncontaminated condition to surface drainage, an application may be made for a reduction in the volume of waste discharged 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 obtained on the process piping at the expense of the private owner.

Section 4.03. 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 such intervals as determined by the Approving Authority as necessary to maintain a control over the discharges from the establishment. The methods used in the examination of all wastewater to determine suspended solids, BOD and concentrations of prohibited wastes shall be as set forth in Article I. All costs for sampling and testing of industrial discharges, as ordered by the Approving Authority, shall be paid by the person making such discharges. All tests shall be conducted by qualified personnel and in accordance with "Standard Methods". Test results shall be reported within a reasonable time

ARTICLE V.

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 summarily disconnected from the sanitary sewer and/or water service. Such disconnection and reconnection would be at the total expense of the customer.

Where acids and chemicals damaging to sewer lines or treatment processes are released to the sewer causing rapid deterioration of these structures or interfering with proper treatment of wastewater, 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 be punished by a fine of not more than \$200.00. 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 for any expense, loss or damage occasioned by the City by reason of such violation.

ARTICLE VIII.Billing, Penalties and Validation

Section 8.01 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 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.

Section 8.02 Penalty for Failure to Pay Bills - Failure to pay monthly bills for the established sewer service 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 Rose Creek and the same penalties and charges now or hereafter provided for by the ordinances of the City of Rose Creek 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 Article VII.

ARTICLE IX.Validity

All ordinances or parts of ordinances in conflict herewith are hereby repealed. The validity of any section, clause, sentence or provision of this ordinance shall not affect the validity of any other part of this ordinance, which can be given effect without invalidating part or parts.