

CHAPTER VII

WASTEWATER AND SEWERS

SECTION VII-1. USER RATE CHARGE SYSTEM.

A. DECLARATION.

It is determined and declared to be necessary and conducive to the protection of the public health, safety, welfare and convenience of the City to collect charges from all users who contribute wastewater to the City's treatment works. The proceeds of such charges so derived will be used for the purpose of operating, maintaining and retiring the debt for such public wastewater treatment works.

B. DEFINITIONS.

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

a. "BOD" (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20°C, expressed in milligrams per liter (mg/l).

b. "Normal Domestic Wastewater" shall mean wastewater that has a BOD concentration of not more than 300 mg/l and a suspended solids concentration of not more than 300 mg/l.

c. "Operation and Maintenance" shall mean all expenditures during the useful life of the treatment works for materials, labor, utilities, and other items which are necessary for managing and maintaining the sewage works achieve the capacity and performance for which such works were designed and constructed.

d. "Replacement" shall mean expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary during the useful life of the treatment works to maintain the capacity and performance for which such works were designed and constructed. The term "operation and maintenance" includes replacement.

e. "Residential Contributor" shall mean any contributor to the City's treatment works whose lot, parcel of real estate, or building is used for domestic dwelling purposes only.

f. "Shall" is mandatory; "May" is permissive.

*Ord 90-490 -
amends cap. VII*

amended by Ord. 437
g. "SS" (denoting 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 laboratory filtering.

h. "Treatment Works" shall mean any devices and systems for the storage, treatment, recycling, and reclamation of municipal sewage, domestic sewage, or liquid industrial wastes. These include intercepting sewers, outfall sewers, sewage collection systems, individual systems, pumping, power and other equipment and their appurtenances; extensions, improvement, remodeling, additions and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment (including land for composting sludge, temporary storage of such compost, and land used for the storage of treatment wastewater in land treatment systems before land application); or any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of municipal waste or industrial waste, including waste in combined storm water and sanitary sewer systems.

i. "Useful Life" shall mean the estimated period during which a treatment works will be operated.

j. "User Charge" shall mean that portion of the total wastewater service charge which is levied in a proportional and adequate manner for the cost of operation, maintenance, and replacement of the wastewater treatment equipment as defined in subparagraph d of this article.

k. "Water Meter" shall mean a water volume measuring and recording device.

1. - added - See Ord 437
C. ANNUAL REVENUES.

a. The user charge system shall generate adequate annual revenues to pay costs of annual operation and maintenance including replacement and costs associated with debt retirement of bonded capital associated with financing the treatment works which the City may by ordinance designate to be paid by the user charge system. That portion of the total user charge which is designed for operation and maintenance including replacement of the treatment works shall be established by this ordinance.

b. That portion of the total user charge collected which is designated for operation and maintenance including

replacement purposes as established in paragraph D, shall be deposited in a separate non-lapsing fund known as the Operation Maintenance and Replacement Fund and will be kept in two primary accounts as follows:

1. An account designed for the specific purpose of defraying operation and maintenance costs (excluding replacement) of the treatment works (Operation and Maintenance Account).

2. An account designed for the specific purpose of ensuring replacement needs over the useful life of the treatment works (Replacement Account). Deposits in the replacement account shall be made annually from the operation, maintenance and replacement revenue in the amount of \$3,500.00 annually.

c. Fiscal year-end balances in the operation and maintenance account and the replacement account shall be carried over to the same accounts in the subsequent fiscal year, and shall be used for no other purposes than those designated for these accounts. Monies which have been transferred from other sources to meet temporary shortages in the operation, maintenance and replacement shall be returned to their respective accounts upon appropriate adjustment of the user charge rates for operation, maintenance and replacement. The user charge rate(s) shall be adjusted such that the transferred monies will be returned to their respective accounts within the fiscal year following the fiscal year in which the monies were borrowed.

D. USER CHARGES.

a. Each user shall pay for the services provided by the City based on his use of the treatment works as determined by water meter(s) acceptable to the City.

b. For residential contributors, monthly user charges will be based on average monthly water usage during the months of January, February, and March. If a residential contributor has not established a January, February, and March average, his monthly user charge shall be the median charge of all other residential contributors.

For industrial and commercial contributors, user charges shall be based on water used during the current month. If a commercial or industrial contributor has a consumptive use of water, or in some other manner uses water which is not returned to the wastewater collection system, the user charge for that contributor may be based on wastewater meter(s) or separate water meter(s) installed and maintained at the contributor's expense, and in a manner acceptable to the City.

c. (Reference is made to Appendix A).

Each contributor shall pay a user charge rate for operation and maintenance including replacement of \$0.80 per 1000 gallons of water metered. The minimum charge per month shall be \$3.75 per month plus \$0.80 per 1000 gallons of water metered.

at 5.00 — amended by Ordinance No. 467

d. (Reference is made to Appendix A).

For those contributors who contribute wastewater, the strength of which is greater than normal domestic sewage, a surcharge in addition to the normal user charge will be collected. The surcharge for operation and maintenance including replace is:

53 see Ord 437
\$0.03 per pound BOD in excess of 300 mg/l
\$0.02 per pound SS in excess of 300 mg/l *add COD 0.36 in excess of 500 mg/l*
109 see Ord 437

See Ord 90.444
e. Any user which discharges any toxic pollutants which cause any toxic pollutants which cause an increase in the cost of managing the effluent or the sludge from the City's treatment works, or any user which discharges any substance which usingly or by interaction with other substances causes identifiable increases in the costs of operation, maintenance, or replacement of the treatment works, shall pay for such increased costs. The charge to each such user shall be as determined by the responsible plant operating personnel and approved by the City Council.

Amended Ord 441
f. The user charge rates established in this article apply to all users of the City's treatment works located in the corporate limits of the City of Buhler.

(E.) MONTHLY BILLINGS.

a. All users shall be billed monthly. Billings for any particular month shall be made within five days after the end of the previous month. Payment are due when the billings are made. Any payment not received by the 19th of the month shall be delinquent.

b. A late payment penalty of 10 percent of the user charge bill will be added to each delinquent bill for each 30 days of delinquency. When any bill is more than 30 days in default, rendition of water and/or sewer service to such premises shall be discontinued until such bill is paid following due notice and opportunity for hearing.

F. BI-ANNUAL REVIEW.

a. The City will review the user charge system bi-annually, and revise user charge rates as necessary to ensure

that the system generates adequate revenues to pay the costs of operation and maintenance including replacement and that the system continues to provided for the proportional distribution of operation and maintenance including replacement costs among users and user classes.

b. The City will notify each user at least annually, in conjunction with a regular bill, of the rate being charged for operation, maintenance including replacement of the treatment works.

APPENDIX "A" TO USER CHARGE ORDINANCE

This appendix presents the methodology to be used in calculating user charge rates and surcharges and illustrates the calculations followed in arriving at the first year's user charges and surcharges. The unit costs established in this appendix are based on estimates of expenses and loadings. The actual expenses and loadings that occur may differ from these estimates and certainly they will change as time passes. Therefore, the units costs must be re-established whenever necessary to reflect actual expenses and loadings. Once the system is in use, the expense and loadings can be determined from operating records and the unit costs can be adjusted based on these figures.

1. Expenses: The total annual expenses associated with the treatment works, as defined in Section B, subparagraph h, are estimated as follows:

<u>Item</u>	<u>Annual Expense</u>
Billing, Collection and Administrative	\$ 1,600.00
Power	16,000.00
Labor (including fringe benefits)	7,300.00
Material Costs	2,200.00
Replacement Costs (See Appendix B)	<u>3,500.00</u>
TOTAL	<u>\$31,200.00</u>

2. Allocation of Expenses: The total operation and maintenance including replacement expense is allocated to the appropriate pollutants in the following manner.

Annual \$ to Treat Annual Flow	= % annual cost allocated to flow x (total annual O & M budget minus billing and collection) = 87.5% x 29,600 = \$25,900
Annual \$ to Treat Annual BOD	= % annual costs allocated to BOD x (total annual O & M budget minus billing and collection) = 7.5% x 29,600 = \$2,200
Annual \$ to Treat Annual S.S.	= % annual cost allocated to SS x (total annual O & M Budget minus billing and collection) = 5% x 29,600 = \$1,480

3. Loadings:

The initial hydraulic loading is estimated to be 39.4 million gal/year.

The initial BOD loading is estimated to be 93,000 pounds/year.

The initial SS loading is estimated to be 93,000 pounds/year.

Annual Infiltration/Inflow Estimate 2.2 million gallons.

4. Unit Costs:

Initial unit cost for flow in \$/1,000 gallons = \$.66.

Initial unit costs for BOD in \$/pound = \$.03.

Initial unit costs for SS in \$/pound = \$.02.

5. Minimum Charge:

Annual billing and collection cost = \$2,800.00

Annual cost to treat infiltration/inflow
(assumed clear water) = unit costs to
treat flow x annual infiltration/inflow = \$1,452.00

TOTAL Annual Minimum Cost = \$4,252.00

Minimum Charge/User/Billing Period = \$.70

6. Residential User Unit Charge: The residential user charge is calculated as follows using the pollutant concentration defining normal domestic wastewater in Section B, subparagraph b, of this ordinance.

Residential charge = Minimum charge & (Unit flow charge x flow)

WHERE:

Unit flow charge is in \$/1,000 gal from paragraph 4

flow is in 1,000 of gallons per month.

An example calculation of a residential charge for a resident of the City of Buhler follows:

Residential Flow = 7,000 gal/month

Residential BOD₅ = 300 mg/l

Residential SS = 300 mg/l

Residential Monthly Charge = minimum charge & (flow x unit flow charge) = 0.70 & (7 x 0.66) = \$5.32

See no. 444
7. Extra Strength Users: For users who contribute wastewater that has greater strength than normal domestic wastewater the user charge will be calculated as follows:

Monthly charge to extra strength user =

Minimum charge & flow x (unit flow charge)

+ flow x (unit BOD charge) x (BOD_{es} - BOD_{nd}) x (.00834)

+ flow x (unit SS charge) x (SS_{es} - SS_{nd}) x (.00834)

WHERE: Total monthly charge to extra strength user is in dollars flow is the volume of wastewater in 1,000 gallons discharged by the extra strength user during the month

Unit flow charge is in \$/1,000 gal as used in paragraph 6

Unit BOD charge is in \$/lb BOD from paragraph 4

Unit SS charge is in \$/lb SS from paragraph 4

BOD_{es} is the average BOD concentration in milligrams per liter (mg/l) contributed by the extra strength user during the month.

SS_{es} is the average SS concentration in mg/l contributed by the extra strength user during the month.

BOD_{nd} is the normal domestic BOD strength in mg/l as defined in Section B, subparagraph b, of the ordinance.

SS_{nd} is the normal domestic SS strength in mg/l as defined in Section B, subparagraph b, of the ordinance.

and .00834 in a unit conversion factor.

An example user charge calculation for an extra strength user of the Buhler Treatment works follows:

Flow = 15,000 gal/month

BOD₅ = 1,000 mg/l

SS = 500 mg/l

Example Monthly Charge = 0.70 + (15.0 x 0.66) + (15.0 x [1,000
- 300] x 0.00834 x 0.03) + (15.0 x [500 - 300] x 0.00834 x
0.02) = 0.70 + 9.90 + 2.63 + 0.50 = \$13.73.

APPENDIX B

TO

USER CHARGE ORDINANCE

This appendix contains a replacement schedule that was developed to determine the amount of revenue needed to fund the Replacement Account. The replacement schedule lists the equipment in the treatment works, the estimated cost of replacement (including an allowance for inflation) over the useful life of the treatment works. Also listed is the estimated cash flow that will occur in the Replacement Account. The replacement dates and costs shown are estimates; the actual replacement dates and costs could be significantly different from those shown. If the actual replacement expenses differ significantly from those listed in the replacement schedule, the funding of the Replacement Account shall be adjusted accordingly.

REPLACEMENT SCHEDULE

Years from Treatment Works in Operation	Replacement Item	Replacement Account		
		Expenditure	Income	Balance
5	Rotor Motors	1,610	19,634	18,024
10	Rotor Motors & Reducer Clarifier Motor & Reducer Comminutor Raw Sewage Pumps	26,870	24,211	15,365
15	Rotor Motors Sludge Pumps	11,270	24,248	28,343
20	Rotor Motors & Reducers Clarifier Motor & Reducer Reducer Comminutor Raw Sewage Pumps	48,110	21,142	1,375

SECTION VII-2. REGULATIONS OF PUBLIC AND PRIVATE SEWERS.

A. DEFINITIONS.

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

b. "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 pipe inside the walls of the building and conveys it to the building sewer, beginning five (5) feet (1.5 meters) outside the inner face of the building wall.

c. "Building Sewer" shall mean the extension from the building drain to the public sewer or other place of disposal.

d. "Combined Sewer" shall mean a sewer receiving both surface runoff and sewage.

e. "Garbage" shall mean solid wastes from the domestic and commercial preparation; cooking and dispensing of food, and from the handling, storage and sale of produce.

f. "Industrial Wastes" shall mean the liquid wastes from industrial manufacturing processes, trade, or business as distinct from sanitary sewage.

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

h. "Person" shall mean any individual, firm, company, association, society, corporation, or group.

i. "PH" shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

j. "Properly Shredded Garbage" shall mean the wastes from the preparation, cooking, 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 (1/2) inch (1.28 centimeters) in any dimension.

k. "Public Sewer" shall mean a sewer in which all owners of abutting properties have equal rights, and is controlled by public authority.

l. "Sanitary Sewer" shall mean a sewer which carries sewage and to which storm, surface, and groundwaters are not intentionally admitted.

m. "Sewage" shall mean a combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments, together with such ground surface, and stormwaters as may be present.

n. "Sewage Treatment Plant" shall mean any arrangement of devices and structures used for treating sewage.

o. "Sewage Works" shall mean all facilities for collection, pumping, treating and disposing of sewage.

p. "Sewer" shall mean a pipe or conduit for carrying sewage.

q. "Shall" is mandatory; "May" is permissive.

r. "Slug" shall mean any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.

s. "Storm Drain" (sometimes termed storm sewer) shall mean a sewer which carries storm and surface waters and drainage, but excludes sewage and industrial wastes, other than unpolluted cooling water.

t. "Superintendent" shall mean the Superintendent of Water and Sewer Department of the City of Buhler, or his authorized deputy, agent, or representative.

u. "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 laboratory filtering.

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

B. REQUIREMENTS AND PROHIBITED USES.

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

b. It shall be unlawful to discharge to any natural outlet within the City, or in any area under the jurisdiction of said City, any sewage or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this ordinance.

c. Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of sewage.

d. The owner of all house, building, or properties used for human employment, recreation, or other purposes, situated within the city and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a public sanitary or combined sewer of the City, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this ordinance, within ninety (90) days after date of official notice to do so, provided that said public sewer is within one hundred (100) feet of the property line.

C. PRIVATE SEWAGE DISPOSAL.

a. Where a public sanitary or combined sewer is not available under the provisions of Section B, subparagraph d, the building sewer shall be connected to a private sewage disposal system complying with the provisions of this section.

b. Before commencement of construction of a private sewage disposal system the owner shall first obtain a written permit signed by the City Clerk or the Superintendent. The application for such permit shall be made on a form furnished by the City, which the applicant shall supplement with duplicate plans, specifications, and other information as are deemed necessary by the City Clerk or the Superintendent. A permit and inspection fee of \$10.00 shall be paid to the City at the time the application is filed.

c. A permit for a private sewage disposal system shall not become effective until the installation is completed to the satisfaction of the Superintendent. He 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 Clerk or the Superintendent when the work is ready for final inspection, and before any underground portions are covered. The inspection shall be made within (72) hours of the receipt of notice by the City Clerk or the Superintendent.

d. The type, capacities, location and layout of a private sewage disposal system shall comply with all recommendations of the Kansas Department of Health and Environment. No permit shall be issued for any private sewage disposal system employing subsurface soil absorption facilities where the area of the lot is less than 20,000 square feet. No septic tank or cesspool shall be permitted to discharge to any natural outlet.

e. At such time as a public sewer becomes available to a property served by a private sewage disposal system, as provided in Section C, paragraph d, 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 and filled with suitable material.

f. The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the city.

g. No statement contained in this section shall be construed to interfere with any additional requirements that may be imposed by the Health Officer of Reno County, Kansas.

h. When a public sewer becomes available, the building sewer shall be connected to said sewer within sixty (60) days and the private sewage disposal system shall be cleaned of sludge and filled with clean bankrun gravel and direct.

SECTION D. CONNECTION TO PUBLIC SEWER.

a. No unauthoizred person shall uncover, make any connections with or opening into, use, alter, or distrub any public sewer or appurtenance thereof without first obtaining a written permit from the City Clerk or the Superintendent.

b. There shall be two (2) classes of building sewer permits: 1. for residential and commercial service, and 2. for service to establishments producing industrial wastes. In either case, the owner or his agent shall make application on a special form furnished by the City. The permit application shall be supplemented with duplicated plans, specifications, or other information considered pertinent in the judgment of the City Clerk or the Superintendent. A permit and inspection fee of \$10.00 for a residential or commercial building sewer permit and \$20.00 for an industrial building sewer permit shall be paid to the City at the time the application is filed.

c. All costs and expense incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the City from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

d. A separate and independent building sewer shall be provided for every building; except where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through

an adjoining alley, court yard, or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.

e. Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the Superintendent, to meet all requirements of this ordinance.

f. The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavation, placing of the pipe, jointing, testing and backfilling the trench, shall all conform to the requirement of the building and plumbing code or other applicable rules and regulations of the City. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the A.S.T.M. and W.P.C.F. Manual of Practice No. 9 shall apply.

g. Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.

h. No person shall make connection of roof downspouts interior and 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.

i. The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the City, or the procedures set forth in appropriate specifications of the A.S.T.M. and the W.P.C.F. Manual of Practice No. 9. All such connections shall be made gastight and watertight. Any deviation from the prescribed procedures and materials must be approved by the City Clerk or the Superintendent before installation.

j. The applicant for the building sewer permit shall notify the City Clerk or the Superintendent when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the Superintendent or his representative.

k. All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the City.

E. STORM WATERS, LIQUIDS AND OTHER SUBSTANCES.

a. No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, including interior and exterior foundation drains, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer.

b. Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designed as combined sewers or storm sewers, or to a natural outlet approved by the City Clerk or the Superintendent. Industrial cooling water or unpolluted process waters may be discharged on approval of the City Clerk or the Superintendent, to a storm sewer, combined sewer, or natural outlet.

c. No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewers:

1. Any gasoline, benzene, naphta, fuel oil, or other flammable or explosive liquid, solid, or gas.

2. Any waters or wastes containing toxic or poisonous solids, liquids, or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the sewage treatment plant, including but not limited to cyanides in excess of two (2) mg/l as CN in the wastes as discharged to the public sewer.

3. Any waters or wastes having a PH lower than 5.5, or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sewage works.

4. Solid or viscous substances in quantities or of much size capable of causing obstruction to the flow in sewers, or other interference with the property operation of the sewage works such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, woods, unground garbage, whole blood, paunch manure, hair and fleshings, entrails and paper dishes, cups, mild containers, etc., either whole or ground by garbage grinders.

d. No person shall discharge or cause to be discharged the following described substances, materials, waters, or wastes if it appears likely in the opinion of the Superintendent that such wastes can harm either the sewers,

sewage treatment process, or equipment, have an adverse effect on the receiving stream, or can otherwise endanger life, limb, public property, or constitute a nuisance. In forming his opinion as to the acceptability of these wastes, the Superintendent will give consideration to such factors as 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 other pertinent factors. The substances prohibited are:

1. Any liquid or vapor having a temperature higher than one hundred fifty (150°F) (65°C).

2. Any water or wastes containing fats, wax, grease or oils, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty-two (32) and one hundred fifty (150°F) (0 and 65°C).

3. Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths (3/4) horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the Superintendent.

4. Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not.

5. Any waters or wastes containing iron, chromium, copper, zinc, and similar objectionable or toxic substances; or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage treatment works exceeds the limits established by the Superintendent for such materials.

6. Any waters or wastes containing phenols or other taste- or odor-producing substances, in such concentrations exceeding limits which may be established by the Superintendent as necessary, after treatment of the composite sewage, to meet the requirements of State, Federal, or other public agencies of jurisdiction for such discharge to the receiving waters.

7. Any Radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Superintendent in compliance with applicable State or Federal regulations.

8. Any waters or wastes having a PH in excess of 9.5.

9. Materials which exert or cause:

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 or sodium sulfate).

(b). Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions.

(c). Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities to constitute a significant load on the sewage treatment works.

(d). Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein.

10. Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed, or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

Sec. 414

11. Any waters or wastes having (1) a 5-day BOD greater than 300 parts per million by weight, or (2) containing more than 300 parts per million by weight, or suspended solids, or (3) having an average daily flow greater than 2 percent of the average sewage flow of the City, shall be subject to the review of the Superintendent. Where necessary in the opinion of the Superintendent, the owner shall provide, at his expense, such preliminary treatment as may be necessary to (1) reduce the biochemical oxygen demand to 300 parts per million by weight, or (2) reduce the suspended solids to 300 parts per million by weight, or (3) control the quantities and rates of discharge of such waters or wastes. Plans, specifications, and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the Superintendent and no construction of such facilities shall be commenced until said approvals are obtained in writing.

e. If any waters or wastes are discharged, or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in Section C of this Article, and which in the

judgment of the Superintendent, may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters, or which otherwise create a hazard to life to constitute a public nuisance, the Superintendent may:

1. Reject the wastes,
2. Require pretreatment to an acceptable condition for discharge to the public sewers,
3. Require control over the quantities and rates of discharge, and/or
4. Require payment to cover the added costs of handling and treating the wastes not covered by existing taxes or sewer charges under the provisions of Section B subparagraph j.

If the Superintendent permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the Superintendent, and subject to the requirements of all applicable codes, ordinances and laws.

f. Grease, oil, and sand interceptors shall be provided when, in the opinion of the Superintendent, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the Superintendent, and shall be located as to be readily and easily accessible for cleaning and inspection.

g. Where preliminary treatment for flow-equalizing facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

h. When required by the Superintendent, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole together with such necessary meters and other appurtenances in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the Superintendent. The manhole shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible at all times.

i. All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made

*See Ord.
No. 444*

in this ordinance shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association, and shall be determined at the control manhole provided, or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb, and property. (The particular analyses involved will determine whether a twenty-four (24) hours composite of all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from 24 hour composites of all outfalls whereas PH's are determined from periodic grab samples.)

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

F. ILLEGAL ACTS.

a. No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is part of the sewage works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct.

G. INSPECTION.

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

b. While performing the necessary work on private properties referred to in Section G, subparagraph (a) above, the Superintendent or duly authorized employees of the City

shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the City employees and the City shall indemnify the company against loss or damage to its property by City employees and against liability claims and demands for personal injury or property damages asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions as required in Section E, subparagraph h.

c. The Superintendent and other duly authorized employees of the City bearing proper credentials and identification shall be permitted to enter all private properties through which the city holds a duly negotiated easement for the purposes of, but not limited to, inspection observation, measurement, sampling, repair, and maintenance of any portion of the sewage works lying within said easement. All entry and subsequent work, if any, on said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

H. PENALTIES.

a. Any person found to be violating any provisions of this ordinance except Section F shall be served by the City with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

b. Any person who shall continue any violation beyond the time limit provided for in Section H, paragraph a, shall be guilty of a misdemeanor, and on conviction thereof shall be fined in the amount not exceeding one hundred (\$100.00) dollars for each violation. Each 24-hour period in which any such violation shall continue shall be deemed a separate offense.

c. Any person violating any of the provisions of this ordinance shall become liable to the City for any expense, loss, or damages occasioned the City by reason of such violation.