

ORDINANCE NO. 1501

AN ORDINANCE ESTABLISHING A USER CHARGE SYSTEM IN THE CITY OF GOODLAND, COUNTY OF SHERMAN, STATE OF KANSAS TO PROVIDE FUNDS NEEDED TO PAY FOR ALL EXPENSES ASSOCIATED WITH THE CITY'S WASTEWATER TREATMENT WORKS, AND REPEALING ARTICLE II, CHAPTER 14 OF THE CODE OF THE CITY OF GOODLAND, KANSAS.

WHEREAS, the City of Goodland, Kansas has constructed wastewater treatment works; and
WHEREAS, the City must pay all expenses associated with said treatment works and charge the users of said treatment works accordingly;
NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF GOODLAND, KANSAS that the following user charge system be established:

ARTICLE I

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 purposes of operation and maintenance (including replacement) of, and retiring the debt for, such public wastewater treatment works.

ARTICLE II

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

Section 1. "BOD" (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in 5 days at 200C, expressed in milligrams per liter (mg/L).
Section 2. "Normal Domestic Wastewater" shall mean wastewater that has a BOD concentration of not more than 200 mg/L and a suspended solids concentration of not more than 200 mg/L.

Section 3. "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 treatment works to achieve the capacity and performance for which such works were designed and constructed.

Section 4. "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.

Section 5. "Reserve" shall mean expenditures for emergency or unanticipated costs necessary to maintain and/or expand and to assure proper capacity and performance of the City's treatment works.

Section 6. "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.

Section 7. "Shall" is mandatory; "May" is permissive.

Section 8. "SS" (denoting Suspended Solids) shall mean solids that either float on the surface of or are in suspension water, sewer, or other liquids and which are removable by laboratory filtering.

Section 9. "Treatment Works" shall mean any devices and systems for the collection, 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 treated 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.

Section 10. "Useful Life" shall mean the estimated period during which a treatment works will be operated.

Section 11. "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, and debt service retirement for, the wastewater treatment works.

Section 12. "Water Meter" shall mean a water volume measuring and recording device, furnished and/or installed by the City of Goodland, Kansas, or furnished and/or installed by a user and approved by the City of Goodland, Kansas.

ARTICLE III

Section 1. The user charge system shall generate adequate annual revenues to pay costs of annual operation and maintenance including replacement costs, 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, and any reserve funds necessary and approved by the Governing Body of the City.

Section 2. That portion of the total user charge collected which is designated for operation and maintenance including replacement purposes as established in Article IV, and reserve funds, shall be deposited in a separate non-lapsing fund known as the Sewer Utility Fund and will be kept in three (3) primary accounts as follows:

a. An account designated for the specific purpose of defraying operating and maintenance costs (excluding replacement) of the treatment works (Operation and Maintenance Account – Treatment and Collection).

b. An account designated for the specific purpose of ensuring replacement needs over the useful life of the treatment works (Replacement Account – Capital Improvement Reserve Fund and Municipal Equipment Reserve Fund). Deposits in the replacement account shall be made at least quarterly from the operation, maintenance and replacement revenue in the amount of \$ 68,200 annually (reference is made to Appendix B of this Ordinance).

c. An account designated for the specific purpose of reserving funds for operation and maintenance of the City's treatment works and the construction of improvements and expansions of such system.

Section 3. Fiscal year-end balances in the Operation and Maintenance Account, Replacement Account and the Reserve 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 Fund, shall be returned to their respective accounts upon appropriate adjustment of the user charge rates for operation, maintenance and replacement. The user charge rates 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.

ARTICLE IV

Section 1. Each user shall pay for the services provided by the City based on their use of the treatment works as determined by water meters acceptable to the City.

Section 2. For Residential contributors, monthly user

charges will be based on average monthly water usage during the months of December, January, and February. If a Residential contributor has not established a December, January, and February average, their monthly user charge shall be the median charge of all other Residential contributors as determined by the City until such time as an average as specified can be established.

For **Non-Residential** contributors, monthly user charges will be based on water used during the current month as determined by the contributor's water meter. Provided: if a **Non-Residential** 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 a wastewater meter(s) or separate water meter(s) installed and maintained at the contributor's expense, and in a manner acceptable to the City.

Section 3 (reference is made to the Appendix A of this Ordinance). The minimum charge per month shall be \$ 4.43. In addition, each contributor shall pay a usage rate for operation and maintenance including replacement and reserve of \$1.10 per 100 cubic feet of water (or wastewater) used (or contributed) as determined in the preceding section, and an additional \$0.00 per 100 cubic feet of water (or wastewater) used (or contributed) as determined in the preceding section for debt retirement.

Section 4 (reference is made to Appendix A of this Ordinance). For those contributors that contribute wastewater, the strength of which is greater than normal domestic wastewater, a surcharge in addition to the normal user charge will be collected. The surcharge for operation and maintenance including replacement is \$0.92 per pound of BOD and \$0.92 per pound of SS, and the additional surcharge for debt retirement is \$0.00 per pound of BOD and \$0.00 per pound of SS.

Section 5. Any user who discharges 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 who discharges any substance which singly or by interaction with other substances causes identifiable increases in the cost 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 Commission.

Section 6. The user charge rates established in this article apply to all users of the City's treatment works, regardless of their location.

ARTICLE V

Section 1. All users shall be billed monthly. Bills shall be payable monthly, and shall be paid on or before the fifteenth day of the month in which the bill is received. A service cutoff notice will be sent out on the first day after the due date. ten days after the due date, service will be discontinued for non-payment of the bill due.

Section 2. The City Clerk will have no authority to remit or diminish the monthly user charge for any user, except for the following:

a. To make corrections as necessary for errors in metering, billing, or when receiving payments; and

b. If leaks occur in the buried portion of the water line between the meter and the building occupied for a **Residential** user during the 3-month period defined in Article IV, Section 2, and after such leaks are verified by the water superintendent, the City Clerk may adjust such user's monthly average water usage when determining the monthly user charge.

Section 3. Bills due the City, not paid by the fifteenth day of the month of billing, shall be subject to a late payment charge of 5% of the unpaid balance of the monthly bill. The late payment charge shall be added to the bill and shall be collected with and in the same manner as the origi-

nal bill.

ARTICLE VI

Section 1. The City will review the user charge system 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, reserve, and debt retirement, and that the system continues to provide for the proportional distribution of operation and maintenance including replacement, reserve and debt retirement costs among users and user classes.

ARTICLE VII

Section 1. "Sewer Tap Fees".
a. Any person, firm, partnership or corporation that desires to make a connection to the sewer system of the City of Goodland, Kansas, shall be charged a tap fee of \$250.00.

b. If the City extends the sewer system to accommodate the connection of the facilities, the owner or developer shall pay the actual cost of such extension in addition to the applicable tap fee.

c. The tap fee and any charges for an extension of the sewer main shall be paid in full prior to the connection to the main sewer line.

ARTICLE VIII

Section 1. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 2. The invalidity 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 such invalid part or parts.

ARTICLE IX

Section 1. This ordinance shall take effect March 1, 2004 and be in force, from and after its passage, approval, recording, and publication as provided by law.

Section 2. Passed and adopted by the Commission of the City of Goodland, State of Kansas, on the 6th day of October, 2003.

Rick Billinger, Mayor

ATTEST:

Mary P. Volk, City Clerk

APPENDIX A TO WASTEWATER USER CHARGE SYSTEM ORDINANCE

(Actual Use Rate Structure - Metered)

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

1. Expenses: The total annual expenses associated with the treatment works (as defined in Article II, Section 8) are estimated as follows:

Item	Annual Expense
Administration, Billing & Collection, Insurance, Professional Services	\$ 112,653
Labor	\$ 104,251
Utilities	\$ 17,650
Materials & Services	\$ 58,575
Replacement Costs (see Appendix B)	\$ 68,200
Reserve Funds	\$ 100,000
Debt Service	\$ 0
Other Income	\$ (600)

TOTAL ANNUAL EXPENSE \$ 460,729

2. Allocation of Expenses: The total annual expenses associated with the treatment works are allocated on either a per-user or per-unit-of-flow basis as follows:

Administration, Billing & Collection, Insurance, and Professional Services (\$112,653) are allocated on a per-user basis.

The remaining expenses (\$348,076) are allocated on a per-unit basis.

3. Loadings:

The initial hydraulic loading is estimated to be 237,164,760 gallons per year, comprised of 225,871,200 gallons per year billed usage, and 11,293,560 gallons per year of infiltration/inflow (I/I). The rate structure developed below allocates the cost of transporting and treating this I/I on a per-user basis; however, the NOTES under steps 4 and 5 explain the adjustments to be made if the costs of I/I are to be allocated on a per-unit-of-flow basis.

4. Per-Unit-of-Flow Costs and Charges:

Annual Expense Allocated on a Per-Unit-of-Flow Cost Basis \$348,076
Annual Total Hydraulic Loading 237,164,760 gal (see NOTE below)
Unit Cost for Flow = (Annual Expense) / (Annual Total Hydraulic Loading) = (\$348,076) / (237,164,760 gal) = \$0.001468 / gal
UNIT CHARGE FOR FLOW \$ 1.47 / 1,000 gal
\$ 1.10 / 100 cu ft
Debt Service Portion = [(debt service) / (annual expense)] x Unit Flow Charge = [(\$0) / (\$348,076)] x (\$1.47) = \$0.00 / 1,000 gal
= [(\$0) / (\$348,076)] x (\$1.10) = **\$ 0.00 / 100 cu ft**

These unit flow charges are to be inserted in Article IV, Section 3 of this Ordinance.

NOTE: If the annual cost of transporting and treating I/I is to be allocated on a per-unit-of-flow basis (see 3. above), the actual billed usage should be used in lieu of the annual total hydraulic load in this unit cost calculation.

5. Per-User Costs and Mini-

APPENDIX B TO WASTEWATER USER CHARGE SYSTEM 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 and the collection system, the estimated times when the equipment will have to be replaced, and the estimated cost of replacement (including an allowance for inflation) over the useful life of the treatment works. The replacement times and costs shown are estimates: the actual replacement times 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 should be adjusted accordingly.

1. Today's Replacement Costs

	5 Years	10 Years	15 Years	20 Year
Comminutor		\$10,000		\$10,000
Blowers		\$50,000		\$50,000
Sludge Pumps		\$20,000		\$20,000
Air Diffusers	\$5,000	\$5,000	\$5,000	\$5,000
Lift Stations (7)		\$140,000		\$140,000

2. Future Replacement Costs

	5 Years	10 Years	15 Years	20 Years
(factor @				
5% inflation)	(1.2763)	(1.6289)	(2.0789)	(2.6533)
Comminutor		\$16,289		\$26,533
Blowers		\$81,445		\$132,665
Sludge Pumps		\$32,578		\$53,066
Air Diffusers	\$6,381	\$8,145	\$10,395	\$13,267
Lift Stations (7)		\$228,045		\$371,462
Total	\$6,381	\$366,502	\$10,395	\$596,993

3. Annual Replacement Fund Needs Future Replacement Costs

SFF - 5 yrs/6%: (0.1774)(\$6,381)=\$1,132				
	<u>-6,381</u>	<u>-6,381</u>	<u>-6,381</u>	<u>6,381</u>
	-0-	\$360,121	\$4,014	\$590,612

SFF - 10 yrs/6%: (0.0759)(\$360,121)=\$27,333

	<u>-360,121</u>		<u>-360,121</u>	
	-0-			\$230,491

SFF - 15 yrs/6%: (0.0430)(\$4,014)=\$173

		<u>-4,014</u>		<u>-975</u>
		-0-		\$229,516

SFF - 20 yrs/6%: (0.0272)(\$229,516)=\$6,243

		<u>-6,243</u>		<u>-229,516</u>
		-0-		

4. Annual Reserve Fund Needs \$100,000 \$100,000 \$100,000 \$100,000

Annual Replacement Account: Minimum Funding Needed = **\$134,881.00**

mum Charges:

Annual Expense Allocated on a Per-User Basis \$ 112,653
Annual Cost to Treat Infiltration/Inflow = (unit flow charge) x (annual I/I) = (\$0.001468/gal x 11,293,560 gal) = \$ 16,579 (see NOTE below)
Total Annual Per-User Expense \$129,232
Number of Users = 2,428
MINIMUM CHARGE per USER per MONTHLY BILLING PERIOD = (annual expense) / [(# of users) x (12 mo/yr)] = [(\$129,232) / (2,428 x 12)] = **\$ 4.43**

The minimum charge per user per monthly billing period is to be inserted in Article IV, Section 3 of this Ordinance.

NOTE: If the annual cost of transporting and treating I/I is to be allocated on a per-unit-of-flow basis (see 3. above), the annual cost to treat I/I expense item used in this minimum charge calculation should be deleted.

6. Extra Strength Surcharges: Annual Expense Allocated on a Per-Pound Basis \$348,076

Annual Loading of BOD and SS (I/I is assumed free of both BOD & SS):
= annual flow (mg) x concentration (mg/L) x 8.34 (conversion factor)
= (225.9 mg) X (200 mg/L) X (8.34) = 376,801 lbs EACH

Cost of Service on a Per-Pound Basis = (annual expense) / (annual loading)
= (\$348,076) / (376,801 lb) = **\$0.92/lb**

Debt Service Portion = [(debt service) / (annual expense)] x Per Pound Charge = [(\$0) / (\$348,076)] x (\$0.92/lb) = **\$ 0.00/lb**

These extra strength surcharges are to be inserted in Article IV, Section 4 of this Ordinance.