

(Published in the Russell County News on October 30, 2013)

ORDINANCE NO. B-537

AN ORDINANCE AMENDING ORDINANCE B-449 AS PASSED BY THE GOVERNING BODY OF THE CITY OF KANSAS ON MAY 21, 2001, BY AMENDING USER CHARGE RATES IN THE CITY OF VICTORIA, COUNTY OF ELLIS, STATE OF KANSAS, TO PROVIDE FUNDS NEEDED TO PAY FOR ALL EXPENSES ASSOCIATED WITH THE CITY'S WASTEWATER TREATMENT WORKS, AND BY AMENDING APPENDIXES "A" AND "B" TO ORDINANCE B-162.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF VICTORIA, KANSAS:

Section 1. This Ordinance is to amend Article IV, Section 3 of Ordinance B-162 of the City of Victoria as follows:

Section 3 (reference is made to Amended Appendix "A" of Ordinance B-162). The minimum charge per month shall be \$4.93. In addition, each contributor shall pay a user charge rate for operation and maintenance including replacement and debt retirement of \$5.52 per 1,000 gallons of water as determined in Section 2 of Ordinance B-162.

Section 2. This Ordinance is to amend Article IV, Section 4 of Ordinance B-449 of the City of Victoria as follows:

Section 4 (reference is made to Amended Appendix "A" of Ordinance B-162). 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 replacement and debt retirement shall be:

\$0.3805 per extra pound of BOD
\$0.3805 per extra pound of SS

Section 3. All ordinances or parts of ordinances in conflict hereby are hereby repealed.

Section 4. This Ordinance shall take effect October 30, 2013, after its publication one time in the Russell County News, the official City newspaper.

PASSED by the Governing Body on the 21st day of October,
2013.

Curtis B. Unrein
Curtis B. Unrein - Mayor

ATTEST:

Mary Pfeffer
Mary Pfeffer, City Clerk

Total monthly charge to extra strength user =
 Minimum Charge + User Flow Charge + BOD surcharge (if any) + SS surcharge
 (if any)

Where:

Minimum charge is calculated as in paragraph 5

User Flow Charge is calculated as in paragraph 6

BOD surcharge = (volume in 1000 gal) + (unit cost for BOD) x (BOD_{ES} -
 BOD_{ND}) x (.00834)

SS surcharge = (volume in 1000 gal) x (unit cost for SS) x (SS_{ES} - SS_{ND}) x
 (.00834)

unit cost for BOD is calculated as in paragraph 4

unit cost for SS is calculated as in paragraph 4

BOD_{ES} is the average BOD concentration in ppm (or mg/l) contributed by the extra
 strength user during the month

SS_{ES} is the average SS concentration in ppm (or mg/l) contributed by the extra strength
 user during the month

BOD_{ND} & SS_{ND} are the normal domestic strength defined in Article II, Section 2, of
 Ordinance B-162 and .00834 is a conversion factor.

An example user charge calculation for an extra strength user follows:

Assume: monthly meter reading of 20,000 gallons
 BOD concentration of 300 ppm (or mg/l)
 SS concentration of 400 ppm (or mg/l)

Minimum Charge:	\$ 3.08
User Flow Charge (\$3.45/1000 gal)	\$ 69.00
BOD Surcharge:	
(20) x (\$0.2378/lb) x (300 - 200) x (.00834)	\$ 3.97
SS Surcharge:	
(20) x (\$0.2378/lb) x (400 - 200) x (.00834)	\$ 7.93
Monthly Bill	\$83.98

Minimum Charge / User/ Month = \$3.08

This minimum charge per user per monthly billing period is to be inserted in Article IV, Section 3 of Ordinance B-162.

6. **User Flow Charge:** The residential user flow charge is calculated as follows using the pollutant concentrations for normal domestic wastewater defined in Article II, Section 2 of Ordinance B-162 (200 ppm or 200 mg/l for both BOD and SS):

unit flow charge	= \$2.6603/1000 gal
unit BOD charge	= unit cost for BOD x (lbs BOD _{ND} /1000 gal)
	= \$0.2378/lb x (200ppm x 1000 gal x .00834 lbs/1000 gal)
	= \$0.3967/1000 gal
unit SS charge	= unit cost for SS x (lbs SS _{ND} /1000 gal)
	= \$0.2378/lb x (200 ppm x 1000 gal x .00834lbs/1000 gal)
	= \$0.3967/1000 gal
TOTAL User Flow Charge	= \$3.45/1000 gal

Where:

Unit flow charge is in \$/1000 gal from paragraph 4

Unit cost for BOD is in \$/lb from paragraph 4

Unit cost for SS is in \$/lb from paragraph 4

BOD_{ND} & SS_{ND} are the normal strength for domestic sewage defined in Article II, Section 2 of Ordinance B-162

and .00834 is a conversion factor.

This user flow charge is to be inserted in Article IV, Section 3, of Ordinance B-162.

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

Assume: Average Monthly meter reading 5000 gallons
Standard Strength Wastewater (200 ppm BOD, 200 ppm SS)

Minimum Charge	\$ 3.08
User Flow Charge	<u>\$17.25</u>
(\$3.45/1000 gal)	
Monthly Bill	\$20.33

7. **Extra Strength User:** For users who contribute wastewater that has greater strength than normal domestic wastewater (defined in Article II, Section 2 of Ordinance B-162 as 200 ppm or 200 mg/l for both BOD and SS), the user charge will be calculated as follows:

CALCULATION OF ANNUAL REPLACEMENT REVENUE

I. <u>Today's Replacement Cost</u>	<u>5 Years</u>	<u>10 Years</u>	<u>15 Years</u>	<u>20 Years</u>
Plant Pump Station Upgrade				\$30,000
Chemical Injection System		\$5,000		\$ 5,000
Town Lift Station Replacement				\$30,000
Force Main Air Valves		\$4,000		\$ 4,000
Lagoon Gate Valves				<u>\$ 4,500</u>
	\$0.00	\$9,000	\$0.00	\$73,500

II. <u>Future Replacement Cost</u>	<u>5 Years</u>	<u>10 Years</u>	<u>15 Years</u>	<u>20 Years</u>
Interest Factor using 5% inflation	1.276	1.629	2.079	2.653
\$0 (5 Year Equipment Cycle)	N/A	N/A	N/A	N/A
\$9,000 (10 Year Equipment Cycle)	N/A	\$14,661	N/A	\$23,877
\$0 (15 Year Equipment Cycle)	N/A	N/A	N/A	N/A
\$73,500 (20 Year Equipment Cycle)	N/A	N/A	N/A	\$194,996

III. <u>Annual Replacement Revenue Needed:</u>				
Future Replacement Costs:	\$0.00	\$14,661	\$0.00	\$218,873
SFF-10 years/6%: (.07587)x(\$14,661) = \$1,112		<u>-14,661</u> \$ 0.00		<u>-14,661</u> \$204,212
SFF-20 years/6%: (.02718)x(\$204,212) = \$5,550				<u>-204,212</u> \$0.00

Total Annual Replacement Revenue to be Collected = \$1,112 + \$5,550 = \$6,662