

AN ORDINANCE ESTABLISHING THE PROCEDURE FOR DETERMINING EQUITABLE SEWER SERVICE CHARGES TO BE LEVIED ON ALL USERS WHICH DISCHARGE WASTEWATER TO THE WASTEWATER SYSTEM OPERATED BY THE CITY OF HATTON, NORTH DAKOTA AND PROVIDING CERTAIN PROHIBITIONS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HATTON, NORTH DAKOTA.

SECTION 1. PURPOSE.

The purpose of this ordinance shall be to generate sufficient revenue to pay all costs for the operation and maintenance of the complete wastewater system. The costs shall be distributed to all users of the system in proportion to each user's contribution to the total loading of the treatment works. Factors such as strength (BOD and TSS), volume, and delivery flow rate characteristics shall be considered and included as the basis for the user's contribution to ensure a proportional distribution of operation and maintenance costs to each user (or user class).

SECTION 2. DETERMINING THE TOTAL ANNUAL COST OF OPERATION AND MAINTENANCE.

The City of Hatton, North Dakota, or its City Engineer, shall determine the total annual costs of operation and maintenance of the wastewater system which are necessary to maintain the capacity and performance, during the service life of the treatment works, for which such works were designed and constructed. The total annual cost of operation and maintenance shall include, but need not be limited to, labor, repairs, equipment replacement, maintenance, necessary modifications, power, sampling, laboratory tests, and a reasonable contingency fund.

SECTION 3. DETERMINING EACH USER'S WASTEWATER CONTRIBUTION PERCENTAGE.

The City of Hatton, North Dakota, or its City Engineer, shall determine for each user or user class the average daily volume of wastewater discharged to the wastewater system, which shall then be divided by the average daily volume of all wastewater discharged to the wastewater system to determine such user's Volume Contribution Percentage. The amount used as the total average daily volume of wastewater shall exclude infiltration and inflow. The City of Hatton, North Dakota, or its City Engineer, shall determine for each user or user class the average daily poundage of 5-day 20-degree Centigrade Biochemical Oxygen Demand (BOD) discharged to the wastewater system which shall then be divided by the average daily poundage of all 5-day BOD discharged to the wastewater system to determine such user's BOD Contribution Percentage.

The City of Hatton, North Dakota, or its City Engineer, shall determine for each user or user class the average daily total Suspended Solids (TSS) poundage discharged to the wastewater system which shall then be divided by the average daily poundage of all TSS discharged to the wastewater system, to determine such user's TSS Contribution Percentage. The Volume Contribution Percentage, BOD Contribution Percentage and TSS Contribution Percentage for each user or user class shall be multiplied by the annual operation and maintenance costs for wastewater treatment of the total volume flow, total 5-day 20-degree centigrade BOD and total TSS, respectively.

SECTION 4. DETERMINING A SURCHARGE SYSTEM FOR USERS WITH EXCESS BOD AND SS.

The City of Hatton, North Dakota or its City Engineer will assess a surcharge rate for all non-residential users discharging wastes with BOD and TSS strengths greater than the average residential user. Such users will be assessed a surcharge sufficient to cover the cost of treating their above-normal strength wastes. Normal strength wastes are considered to be 200 ppm BOD and 250 ppm TSS. The surcharge rate structure for such above-normal strength waste dischargers is attached (Appendix A).

SECTION 5. DETERMINING EACH USER'S WASTEWATER SERVICE CHARGE.

Each non-residential user's wastewater treatment cost contributions as determined in Sections 3 and 4 shall be added together to determine such user's annual wastewater service charge. Residential users may be considered to be one class of user and an equitable service charge may be determined for each user based on an estimate of the total wastewater contribution of this class of user. The governing body may classify industrial, commercial, and other non-residential establishments as a residential user, provided that the wastes from these establishments are equivalent to the wastes from the average residential user with respect to volume, total suspended solids, and BOD. Each user's wastewater treatment cost contribution will be assessed in accordance with the attached rate schedule (Appendix B).

SECTION 6. WASTEWATER FACILITIES REPLACEMENT FUND.

A reserve fund called the Wastewater Facilities Replacement Fund is hereby established within the wastewater utility fund for the purpose of providing sufficient funds to be expended for obtaining and installing equipment, accessories and appurtenances during the useful life (20 years) of the wastewater treatment facilities necessary to maintain the capacity and performance for which such facilities are designed and constructed (see Appendix C).

SECTION 7. PAYMENT OF THE USER'S WASTEWATER SERVICE CHARGE AND PENALTIES.

The City shall submit an annual statement to the user for the user's annual wastewater service charge or one-twelfth of the user's annual wastewater service charge may be included with the monthly water and/or wastewater utility billing. The City shall add a penalty of 5 percent per month if the payment is not received by the City within 60 days. Should any user fail to pay the user wastewater service charge and penalty within 90 days of the due date, the City may stop the wastewater service to the property.

SECTION 8. REVIEW OF EACH USER'S WASTEWATER SERVICE CHARGE.

The City shall review the total annual cost of operation and maintenance as well as each user's Wastewater Contribution Percentage not less often than every two years and will revise the system as necessary to assure equity of the service charge system established herein and to assure that sufficient funds are obtained to adequately operate and maintain the wastewater treatment works. The City shall apply excess revenues collected from a class of users to the costs of operation and maintenance attributable to that class for the next year and adjust the rate accordingly. If a significant user, such as in industry, has completed in-plant modifications which would change that user's Wastewater Contribution Percentage, the user can present, at a regularly scheduled meeting of the governing body, such factual information and the City shall then determine if the user's Wastewater Contribution Percentage is to be changed. The City shall notify the user of its findings as soon as possible.

SECTION 9. NOTIFICATION.

Each user will be notified, at least annually, in conjunction with a regular bill, of the rate and that portion of the user charges which are attributable to wastewater treatment services.

SECTION 10. WASTES PROHIBITED FROM BEING DISCHARGED TO THE WASTEWATER TREATMENT SYSTEM.

The discharge of any waters containing toxic or poisonous solids, liquids, or gases in sufficient quantity, either singly, or by interaction with other wastes, to contaminate the sludge of any municipal systems, or 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 or have an adverse effect on the waters receiving any discharge from the treatment works is hereby prohibited.

Each user which discharges any toxic pollutants which cause an increase in the cost of managing the effluent or the sludge of the Hatton, North Dakota treatment works shall pay for such increased costs.

(Article No. 2-5 of the City's "Regulation of Sewer Use" Ordinance contains additional requirements covering the use of the City's public sewers.)

SECTION 11. PROHIBITION OF CLEAR WATER CONNECTIONS.

No person shall make connection of roof downspouts, 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.

SECTION 12. PROPER DESIGN AND CONSTRUCTION OF NEW SEWERS AND CONNECTIONS.

The size, slope, alignment, materials of construction of all sanitary sewers and sewer connections, and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling the trench, shall all conform to the requirements of the building and plumbing code or other applicable rules and regulations of the City of Hatton and the State of North Dakota. In the absence of code provision 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.

(Article No. 3-4 of the City's "Regulation of Sewer Use" Ordinance contains additional requirements covering the proper design and construction of the City's sanitary sewers, building sewers, and connections.)

SECTION 13. VALIDITY.

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

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.

SECTION 14: ORDINANCE IN FORCE.

This ordinance shall be in full force and effect from and after its passage, approval, recording and publication as provided by law.

ADOPTED:

1st Reading April 4, 1983

2nd Reading May 2, 1983

Publication May 11, 1983

SIGNED:


Mayor, Alvar Melin

ATTESTED:


Auditor, Faye Duncan

APPENDIX A
SURCHARGE RATE SCHEDULE FOR
ABOVE NORMAL STRENGTH WASTES

The City of Hatton, North Dakota, or its Engineer, has determined that the average total suspended solids (TSS) and 5-day biochemical oxygen demand (BOD) daily loadings for the average residential user are 200 ppm BOD and 250 ppm TSS. The City of Hatton, North Dakota or its Engineer, has assessed a surcharge rate for all non-residential users discharging wastes with BOD and TSS strengths greater than the average residential user. The surcharge will be sufficient to cover the costs of treating such user's above normal strength wastes. Such users will pay an additional service charge of 0.31 cents per 1,000 gallons for each 25 ppm over 200 ppm of BOD and 0.25 cents per 1,000 gallons for each 25 ppm over 250 ppm TSS.

APPENDIX B
RATE SCHEDULE

Residential users are considered to be one class of user and are assessed a charge of \$5.00 per two months. Nonresidential users with flows no greater than the average residential user's flow of 20,000 gallons per two months and with BOD and TSS no greater than the average residential user's strength of 200 ppm BOD and 250 ppm TSS will pay the charge of \$5.00 per two months.

Nonresidential users and residential users with volumes greater than the average residential user will pay an additional charge of \$0.25 per 1,000 gallons per two months for all flows greater than the average residential user's flow of 20,000 gallons per two months.

Any nonresidential user with BOD and TSS greater than the average residential user's strength of 200 ppm BOD and 250 ppm TSS will pay a surcharge in accordance with the rates shown in the surcharge rate schedule.

An additional lump sum user fee of \$5.00 for residential and \$7.00 for non-residential users will be charged as a means of debt retirement.

APPENDIX C
WASTEWATER FACILITIES REPLACEMENT FUND SCHEDULE

The reserve fund called the Wastewater Facilities Replacement Fund established within the wastewater utility fund as an interest-bearing account shall be funded by a deposit of \$750.00 per year obtained from the wastewater utility fund at the end of each fiscal year.

CALCULATIONS
FOR
SEWER USER CHARGES

RE: Hatton, North Dakota
E.P.A. C-380536-94
KLJ 8251

A. ESTIMATED ANNUAL OPERATION AND MAINTENANCE COSTS

Administrative	\$ 2,390
Labor	3,400
Power	1,400
Sampling, Monitoring	500
Equipment and Materials	600
Contingencies	500
Reserve and Replacement	750
	\$ 9,540/year
	\$ 795/month

B. CURRENT AVERAGE FLOW PER RESIDENCE (254 residences)

83 gal./capita/day x 30 days x 4 persons/residence = 9,960 gal./mo.
1R Avg. = 10,000 gal./mo.

C. CURRENT FLOW FROM OTHER USERS (48 Commercial)

2 Cafes	10,000 gal. each	1 R x 2 = 2 R
1 Laundromat	30,000 gal.	3 R x 1 = 3 R
1 6-Room Motel	9,600 gal.	1 R x 1 = 1 R
1 School	37,000 gal.	3.7R x 1 = 3.7R
2 Service Stations	7,000 gal. each	1 R x 2 = 2 R
1 Nursing Home	125,000 gal.	12.5R x 1 = 12.5R
40 Unidentified	Less Than 10,000 gal. each	1 R x 40 = 40 R

64.2R

D. RATE SCHEDULE

Schedule in force (2 month billing rates):

Residential: \$5.00 user fee + \$5.00 for the first 20,000 gal.
Commercial: \$7.00 user fee + \$5.00 for the first 20,000 gal.

1982 Revenues	\$ 8,036.95*
1982 Expenses	6,854.25
Net	\$ 1,182.70

* The user fee was not charged in 1982.

E. DETERMINING ANNUAL REVENUE

Operation and Maintenance:

Residential: 254 x \$5.00 = \$1,270/2 mo. = \$635.00/mo.
Commercial: 64.2 x \$5.00 = \$ 321/2 mo. = \$160.50/mo.

Debt Retirement (User Fees):

Residential: 254 x \$5.00 = \$1,270/2 mo. = \$635.00/mo.
Commercial 48 x \$7.00 = \$ 336/2 mo. = \$168.00/mo.

Total \$ 1,598.50/mo.

\$19,182.00/yr.

F. DEBT AMORTIZATION

\$254,452 x 25% @ 9-1/2% interest for 10 years = \$ 9,775/yr.
\$ 815/mo.

G. SUMMARY OF BUDGET

Debt Amortization	\$ 9,775/yr.
Operation and Maintenance	\$ 9,540/yr.
Expenses	<u>\$19,315/yr.</u>
Revenue	<u>\$19,182/yr.</u>
	\$ 133/yr.

H. DETERMINATION OF THE BOD AND TSS SURCHARGE RATE FOR ABOVE NORMAL STRENGTH WASTES

\$2.50/mo. ÷ 10,000 gal./residence = \$0.25/1,000 gal./mo.

Estimated allocation of costs for operation and maintenance of the City's wastewater treatment works are as follows:

Q (flow) = 80% of the O & M costs
BOD = 10% of the O & M costs
SS = 10% of the O & M costs

The strength of the average residential users' wastes are:

BOD = 200 mg./l. = 1.67 #/1000 gal.
SS = 250 mg./l. = 2.08 #/1000 gal.

The cost to treat 1,000 gal. is \$0.25 and is broken down as follows:

Q = 80% x \$0.25 = \$ 0.20
BOD = 10% x \$0.25 = \$ 0.025
TSS = 10% x \$0.25 = \$ 0.025

For each 25 mg./l. over the average, the cost should be:

BOD: $\frac{25 \text{ mg./l.}}{200 \text{ mg./l.}} \times \$0.025 = \$0.0031/\text{per } 25 \text{ mg./l. per } 1,000 \text{ gal.}$

TSS: $\frac{25 \text{ mg./l.}}{250 \text{ mg./l.}} \times \$0.025 = \$0.0025/\text{per } 25 \text{ mg./l. per } 1,000 \text{ gal.}$

ORDINANCE NO. 199A.

AN ORDINANCE TO AMEND APPENDIXES A, B, AND C OF ORDINANCE NO. 199, WHICH ORDINANCE NO. 199 IS AN ORDINANCE ESTABLISHING THE PROCEDURE FOR DETERMINING EQUITABLE SEWER SERVICE CHARGES TO BE LEVIED ON ALL USERS WHICH DISCHARGE WASTEWATER TO THE WASTEWATER SYSTEM OPERATED BY THE CITY OF HATTON, NORTH DAKOTA AND PROVIDING CERTAIN PROHIBITIONS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HATTON, NORTH DAKOTA, that Appendixes A, B, and C of Ordinance No. 199 of the HATTON CITY ORDINANCES SHALL BE AMENDED TO READ AS FOLLOWS:

APPENDIX A
SURCHARGE RATE SCHEDULE FOR
ABOVE NORMAL STRENGTH WASTES

The City of Hatton, North Dakota, or its Engineer, has determined that the average total suspended solids (TSS) and 5-day biochemical oxygen demand (BOD) daily loadings for the average residential user are 200 ppm BOD and 250 ppm TSS. The City of Hatton, North Dakota, or its Engineer, has assessed a surcharge rate for all non-residential users discharging wastes with BOD and TSS strengths greater than the average residential user. The surcharge will be sufficient to cover the costs of treating such user's above normal strength wastes. Such users will pay an additional service charge of \$.31 cents per 1,000 gallons for each 25 ppm over 200 ppm of BOD and \$.25 cents per 1,000 gallons for each 25 ppm over 250 ppm TSS.

APPENDIX B
RATE SCHEDULE

Residential users are considered to be one class of user and are assessed a charge of \$ ^{12.00} 7.00 per two months. Nonresidential users with flows no greater than the average residential user's flow of 20,000 gallons per two months and with BOD and TSS no greater than the average residential user's strength of 200 ppm BOD and 250 ppm TSS will pay the charge of \$ ^{14.00} 7.00 per two months.

Nonresidential users and residential users with volumes greater than the average residential user will pay an additional charge of \$.50 per 1,000 gallons per two months for all flows greater than the average residential user's flow of 20,000 gallons per two months.

Any nonresidential user with BOD and TSS greater than the average residential user's strength of 200 ppm BOD and 250 ppm TSS will pay a surcharge in accordance with the rates shown on the surcharge rate schedule.

p. 116

An additional lump sum user fee of \$ 5.00 for residential and \$ 7.00 for nonresidential users will be charged as a means of debt retirement.

APPENDIX C
WASTEWATER FACILITIES REPLACEMENT FUND SCHEDULE

The reserve fund called the Wastewater Facilities Replacement Fund established within the wastewater utility fund as an interest-bearing account shall be funded by a deposit of \$ 750.00 per year obtained from the wastewater utility fund at the end of each fiscal year.

Dated: March 9, 1988

Benjie Johnson Pres,
Alvar Melin, Mayor

ATTEST:

Faye Duncan
Faye Duncan, City Auditor

First Reading: 3-9-88
Second and Final Reading: 4-4-88
Effective Date: 4-4-88
Publication: 5-11-88

Persons Voting For: Earl Thompson, Clarence Bye, John Naasted
Persons Voting Against: David Green,
Persons Abstaining: _____