

# **Hamilton County, Ohio The Metropolitan Sewer District of Greater Cincinnati Rate Structure and Comparisons**



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# MSD Rate Structure





# Rate Structure

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- MSD annually reviews the adequacy of its rate structure to generate sufficient revenues for its operating and capital requirements and engages the services of an independent consultant to advise it.
- Adjustments to sewer rates are based upon the cost of service from the customer classes served and MSD's overall level of revenue requirements.



# Rate Structure

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- The sewer charges consist of a minimum base charge and a volumetric charge.
- The standard sewer rates are the same for residential, commercial, and industrial users.
- Industrial users may be subject to additional surcharges based upon the strength of the wastewater discharged and a pretreatment monitoring charge.
- The minimum charge is based on water meter size except for multifamily properties. Multifamily properties are based upon either the meter size or the number of units, whichever results in the larger minimum charge.
- Residential customers are primarily billed quarterly and larger users are primarily billed monthly.



# Base Charge

## Minimum Base Charges for Residential, Commercial and Industrial Customers

Meter Size (Inches)	Number of Family Units	Monthly Bills (\$)	Quarterly Bills (\$)
5/8	1	57.11	117.35
3/4	2-3	68.49	151.32
1	4-5	88.14	207.44
1 1/2	6-12	135.90	352.51
2	13-20	187.29	499.33
3	21-50	459.03	1,281.49
4	51-115	760.08	2,122.30
6	116-250	1,487.10	4,193.17
8	Over 250	2,210.47	6,256.78
10	"	2,970.50	8,360.75
12	"	3,458.83	9,653.24



# Volumetric Charge

- A volumetric charge is applied to all residential, commercial, and industrial customers who use more than 5 CCF (500 cubic feet) of water each month. If the customers are billed on a quarterly basis, the volumetric charge applies to water usage over 9 CCF (900 cubic feet). The volumetric charges which apply to all meter sizes are:

## Commodity Charges for Residential, Commercial and Industrial Customers who are billed on a monthly basis

Greater than 5, up to 50 Ccf	\$5.879 per Ccf
Over 50 Ccf	\$4.701 per Ccf

## Commodity Charges for Residential, Commercial and Industrial Customers who are billed on a quarterly basis

Greater than 9, up to 150 Ccf	\$5.879 per Ccf
Over 150 Ccf	\$4.701 per Ccf



# Surcharges

- Surcharge rates are applied to customers who have high strength waste discharge. MSD's surcharge rates are:

Surcharge Rates	
Suspended Solids (SS)	\$0.002921 per Ccf for each mg/l of SS strength above 300 mg/l
Biochemical Oxygen Demand (BOD)	\$0.004989 per Ccf for each mg/l of BOD strength above 240 mg/l
Nitrogenous Oxygen Demand (NOD)	\$0.004369 per Ccf for each mg/l of Total Kjeldahl Nitrogen (TKN) strength above 25 mg/l

- If the strength of a pollutant listed above is less than 80% of the corresponding value for normal strength sewage, a credit is issued to offset a portion of (or in some cases all of) the surcharge.





# Industrial Pretreatment Monitoring

- All industrial users that are required to obtain a wastewater discharge permit or which are subject to federal pretreatment standards must pay an industrial pretreatment charge.

## Industrial Pretreatment Charges

Annual Fee	\$3,062 per annum
Monitoring Charge	\$18,987 maximum per monitoring event

- The pretreatment charge is designed to pay the costs of investigations, record keeping, administration, and monitoring of industrial waste charges to the system.



# Rate Structure - MSD

- The rate structure for MSD for 5/8 inch meter size is:

Monthly	
Base Charge	Usage Charge
\$57.11	\$5.88 per CCF*
*Charge applies to usage above 5 CCF	

Quarterly	
Base Charge	Usage Charge
\$117.35	\$5.88 per CCF*
*Charge applies to usage above 9 CCF	

- MSD estimates average usage of 25 CCF per quarter (or 8.33 CCF per month). Using this average, the monthly bill under this structure would be \$76.71 per month. The average quarterly bill would be \$211.41 per quarter.



# MSD's Rate Increases

- MSD's rate increases over the past five years have been:

Rate Increase History	
Year	Rate Increase
2011	8.00%
2012	8.00%
2013	5.00%
2014	6.00%
2015	6.00%

- MSD's average rate increase over the last five years has been 6.60% per year.

# Rate Structures for Akron, Cleveland, Columbus, and Toledo





# Rate Structure - Akron

- The residential and commercial rate structure for the City of Akron is:

Monthly	
Base Charge	Usage Charge
\$3.75	\$10.66 per CCF

- Industrial users pay \$3.75 plus \$9.567 per CCF.
- If the average usage was 8.33 CCF of water each month, the average bill under this structure would be \$92.58.
- The City of Akron charges all users on a monthly basis.



# Akron's Rate Increases

- Akron's volumetric rate increases over the past five years have been:

Rate Increase History	
Year	Rate Increase
2011	25.00%
2012	15.25%
2013	9.75%
2014	40.00%
2015	27.00%

- Akron's average rate increase over the last five years has been 23.40% per year.



# Rate Structure - Cleveland

- The rate structure for the Northeast Ohio Regional Sewer District (Cleveland) is:

Quarterly	
Base Charge	Usage Charge
\$6.90	\$6.97 per CCF

- The Northeast Ohio Regional Sewer District charges all users on a quarterly basis.
- If the average usage was 25 CCF feet of water each quarter, the average bill under this structure would be \$181.03 for the quarter.



# Cleveland's Rate Increases

- The Northeast Ohio Regional Sewer District's rate increases over the past five years have been:

Rate Increase History	
Year	Rate Increase
2011	9.80%
2012	10.70%
2013	11.90%
2014	12.10%
2015	12.10%

- The Northeast Ohio Regional Sewer District's average rate increase over the last five years has been 11.32% per year.





# Rate Structure - Columbus

- The rate structure for the City of Columbus is:

Monthly	
Base Charge	Usage Charge
\$3.80	\$3.91 per CCF

Quarterly	
Base Charge	Usage Charge
\$11.41	\$3.91 per CCF

- The City of Columbus bills all residential customers quarterly, while larger commercial customers are billed monthly.
- In addition to the rate charges above, the City of Columbus charges a fixed fee to pay for certain capital projects. The fee, known as the Clean Rivers Surcharge, is described on the following page.
- If the average usage for a residential customer was 8.33 CCF of water each month, the average monthly bill under this structure, including the Clean Rivers Surcharge, would be \$39.60. The average quarterly bill would be \$118.82 per quarter.



## Rate Structure - Columbus (cont'd)

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- Since 2006, the Clean Rivers Surcharge has been enacted to support the city's 40 year, \$2.5 billion capital improvement program.
- The fee is based on the size of impervious (non-penetrable) surface area for each property. Examples of impervious surface area are parking lots, roofs, and driveways.
- Each property is assigned a number of "Equivalent Residential Units".
  - All residential properties are assigned an Equivalent Residential Unit value of 1.
  - Other properties will be calculated at roughly 2,000 square feet of impervious surface area to one Equivalent Residential Unit.
- The Clean Rivers Surcharge is equal to \$3.22 per month or \$9.66 per quarter, multiplied by the number of Equivalent Residential Units to arrive at each property's fee.



# Columbus's Rate Increases

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- Columbus's rate increases over the past five years have been:

Rate Increase History	
Year	Rate Increase
2011	6.00%
2012	3.00%
2013	1.00%
2014	2.00%
2015	3.00%

- Columbus's average rate increase over the last five years has been 3.00% per year.



# Rate Structures - Toledo

- The residential and commercial rate structure for the City of Toledo is:

Monthly	
Base Charge	Usage Charge
\$24.24	\$3.82 per CCF

  

Quarterly	
Base Charge	Usage Charge
\$46.06	\$3.82 per CCF

- If the average usage was 8.33 CCF of water each month, the average monthly bill under this structure would be \$56.09. The average quarterly bill would be \$141.61.



# Toledo's Rate Increases

- Toledo's rate increases over the past five years have been:

Rate Increase History	
Year	Rate Increase
2011	3.00%
2012	3.00%
2013	3.00%
2014	3.00%
2015	7.10%

- Toledo's average rate increase over the last five years has been 3.82% per year.
- Toledo's City Council has approved rate increases of 7.10% per year through 2019 and a 7.90% rate increase in 2020.



# Comparable Rate Structures - Monthly

- The single family residential sewer charges for the associated monthly usage (in CCF) are:

Usage CCF/ Month	Akron	MSD	Cleveland*	Columbus**	Toledo
1	\$ 14.41	\$ 57.11	\$ 9.27	\$ 10.93	\$ 28.06
2	25.07	57.11	16.23	14.84	31.88
3	35.73	57.11	23.20	18.75	35.71
4	46.39	57.11	30.16	22.66	39.53
5	57.05	57.11	37.13	26.57	43.35
6	67.70	62.99	44.09	30.48	47.17
7	78.36	68.87	51.06	34.39	50.99
8	89.02	74.75	58.02	38.30	54.82
9	99.68	80.63	64.99	42.21	58.64
10	110.34	86.51	71.95	46.12	62.46

\* Northeast Ohio Regional Sewer District only bills on a quarterly basis. These are the quarterly charges divided by three.

\*\* Columbus rates include the Clean Rivers Surcharge.



# Comparable Rate Structures - Quarterly

- The single family residential sewer charges for the associated quarterly usage (in CCF) are:

Usage CCF/ Quarter	Akron*	MSD	Cleveland	Columbus**	Toledo
3	\$ 43.23	\$ 117.35	\$ 27.80	\$ 32.80	\$ 57.53
6	75.20	117.35	48.69	44.53	68.99
9	107.18	117.35	69.59	56.26	80.46
12	139.16	134.99	90.48	67.99	91.92
15	171.14	152.62	111.38	79.72	103.39
18	203.11	170.26	132.27	91.45	114.86
21	235.09	187.90	153.17	103.18	126.32
24	267.07	205.54	174.06	114.91	137.79
27	299.04	223.17	194.96	126.64	149.25
30	331.02	240.81	215.85	138.37	160.72

\* Akron only bills on a monthly basis. These are the monthly charges multiplied by three.

\*\* Columbus rates include the Clean Rivers Surcharge.