



Charlotte Water

FY 24 Industrial Sewer Rate Change Update

Content

- ☐ Rate Changes Talking Points and FAQs
- ☐ Industrial Waste Charge and Non-Monitored Industries
- ☐ Monitored Effluent Charges: Ammonia, COD, TSS
- □ Septage

Rate Change Communication

Key Talking Points/FAQs

- □ Rates are proposed to increase in three phases:
 - July 1, 2023
 - January 1, 2024
 - Incremental increases annually
- Charlotte Water operates under a cost recovery model (e.g. not a forprofit model)
 - Last increase was in 2011
 - Charlotte Water has completed a rate study with a reputable utility consulting firm, Raftelis, to better understand our rates and cost of treatment
 - We are performing cost recovery due to:
 - Increased costs of treatment
 - *Treatment plant improvements*
 - Operational costs, program costs

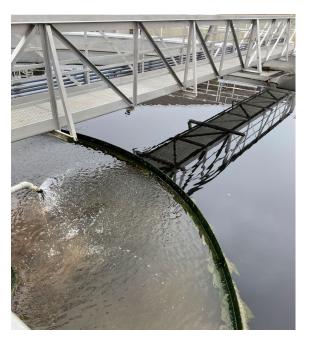
Key Talking Points/FAQs

- Why do businesses incur these rates?
 - Treatment plants designed and regulated for domestic (residential) strength wastewater
 - Industries usually have different/stronger compositions of:
 - Total suspended solids (TSS)
 - Chemical oxygen demand (COD)
 - Ammonia (NH3)
 - Each industry/business is unique in their usage and discharge

Key Talking Points Cont'd

- How much can I expect my bill to increase?
 - Each business is unique, so there is no "one size fits all" answer to how rates will change.
 - Your bill is calculated based on how much water you use and your wastewater composition.
 - In general, the more you use, the more you pay.
 - For monitored industries, the higher the concentration of chemical oxygen demand (COD), total suspended solids (TSS) or ammonia discharged, the more you will pay.

Industrial Waste Charge and Non-Monitored Industries





Treatment plants designed and regulated for domestic (residential) strength wastewater

- ☐ Industries usually have different/stronger compositions of:
 - Chemical oxygen demand (COD)
 - Total suspended solids (TSS)
 - Ammonia (NH3)
- Each industry/business is unique in their usage and discharge
- Effluent is the term used for wastewater discharge

Industrial and Commercial Sewer Rates

- All industries incur the Industrial Waste charge, under the Sewer Charges section of your bill
- □For Commercial Businesses charges are by volume used at incoming meter
- For Significant Industrial Users charges are by volume measured at the effluent wastewater meter
- \square Measured in Ccf (1 Ccf = 748 gallons)

Current industrial waste charge: \$0.27/Ccf

SEWER CHARGES				
Usage Fees	Rate/Ccf	X	Usage	
	\$5.46		264	\$1,441.44
Sewer Fees (Fixed & Availability)				\$77.75
Sewer, Industrial Waste (chg/Ccf = \$0.27)		\$134.99		
			Total Sewer Charges	\$1,654.18

Non-monitored Industrial and Commercial Sewer Rates

Non-monitored industries, e.g., breweries and restaurants, incur the high strength volume charge

\square Why?

 Higher than domestic strength wastewater chemical composition of COD, TSS, and/or NH3

SEWER CHARGES				
Usage Fees	Rate/Ccf	X	Usage	
	\$5.46		34	\$185.64
Sewer Fees (Fixed & Availability)			\$49.01	
Sewer, Industrial Waste (chg/Ccf = \$0.27)			\$9.18	
Sewer, High Strength Volume (chg/Ccf = \$1.18)			\$40.12	
			Total Sewer Charges	\$283.95

Industrial Waste Charge Changing in 3 phases

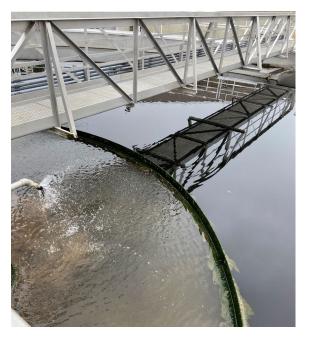
- □Industrial Waste Charge is expected to increase to \$0.38/Ccf
- □Incremental annual increases to be expected starting July 1, 2024



Example: Monthly Charges for a Local Bakery with 38 Ccf use

Until June 30th, 2023 July 1, 2023 January 1, 2024 Industrial waste charge: Industrial waste charge: Industrial waste charge: \$0.27/Cef x 38 Cef = $$0.38/\text{Ccf} \times 38 \text{ Ccf} =$ $$0.50/\text{Ccf} \times 38 \text{ Ccf} =$ \$10.25 \$14.44 \$19.00 High strength charge: High strength charge: High strength charge: $1.18/\text{Ccf} \times 38 \text{ Ccf} = 1.18/\text{Ccf} \times 38 \text{$ $1.88/\text{Ccf} \times 38 \text{ Ccf} =$ $$2.58/\text{Ccf} \times 38 \text{ Ccf} =$ \$44.84 \$71.44 \$98.04 \$85.88 \$55.09 \$117.04 Monthly Monthly Monthly

Monitored Effluent Charges: Ammonia, COD, TSS





Treatment plants designed for domestic (residential) strength wastewater

- ☐ Industries usually have different/stronger compositions of:
 - Ammonia (NH3)
 - Chemical oxygen demand (COD)
 - Total suspended solids (TSS)
- Each industry/business is unique in their usage and discharge
- Effluent is the term used for wastewater discharge

Monitoring and Sampling

- Sampling intervals based on your permit
- Charges based on effluent composition and strength
 - Occur when ammonia, chemical oxygen demand (COD) or total suspended solids (TSS) are above domestic strength levels

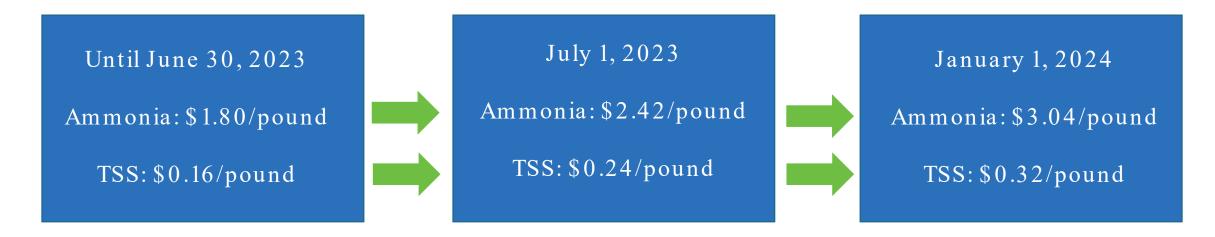
Ammonia >25 mg/l

COD >500 mg/l TSS >250 mg/l

- Samples are taken in mg/L and converted to pounds/Ccf using effluent flow submitted by each Significant Industrial User
- □1Ccf equals 748 gallons

Monthly System Protections Charges for TSS and Ammonia Changing in 3 phases

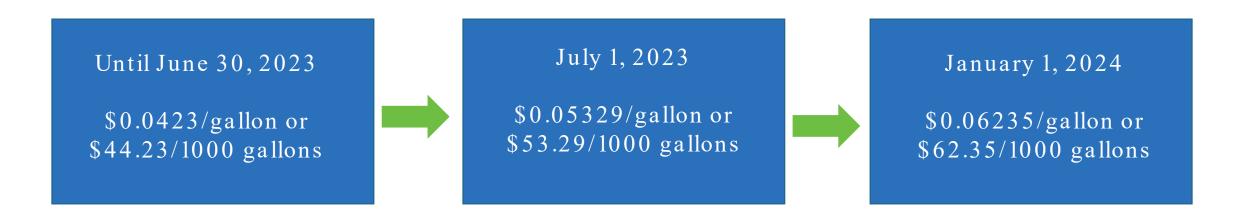
- □COD NO proposed change for FY2024: \$0.12
- □TSS proposed to increase by \$0.16
- □ Ammonia proposed to increase by \$1.24
- Proposed changes reflect actual cost of treatment
- □Incremental annual increases expected starting July 1, 2024



Septage Rates

Septage Hauler Rates

- □Increase of \$18.12/1000 gallons, in phases
- Proposed changes reflect actual cost of treatment
- Incremental annual increases expected starting July 1, 2024



DRAFT Additional SIU Slides

Ideas for potentially reducing your Industrial Charges

- Install pretreatment or upgrade your current system (be sure to request and receive Authorization to Construct prior to changes)
- Water Conservation
 - However, be aware of concentrations of pollutants
- Every Industry is different and there is no one size fits all solution. These are just ideas to think about for saving your industry \$\$\$

Sampling to Billing

- Self-Monitoring and Industrial Monitoring data is delivered to your Environmental Compliance Specialist for review
- Once reviewed, the data goes into the System Protection database
- When these numbers are entered into the database, the new sampling data will be pulled the next time you are billed.
- Sampling usually applies to bills ~2 months after sampling occurred.

Thank you!



