



Offsetting Collection System Maintenance and Treatment Costs Through Sampling and Analysis

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Monroe Township Utility Department

1



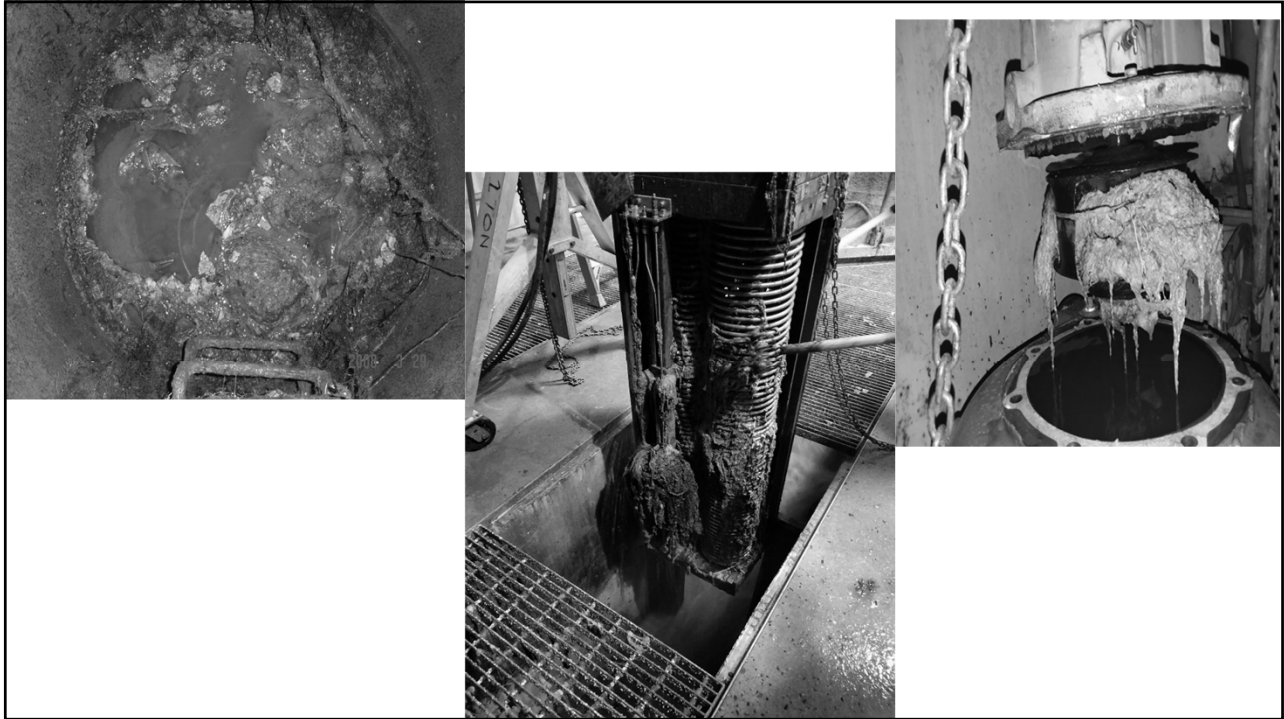
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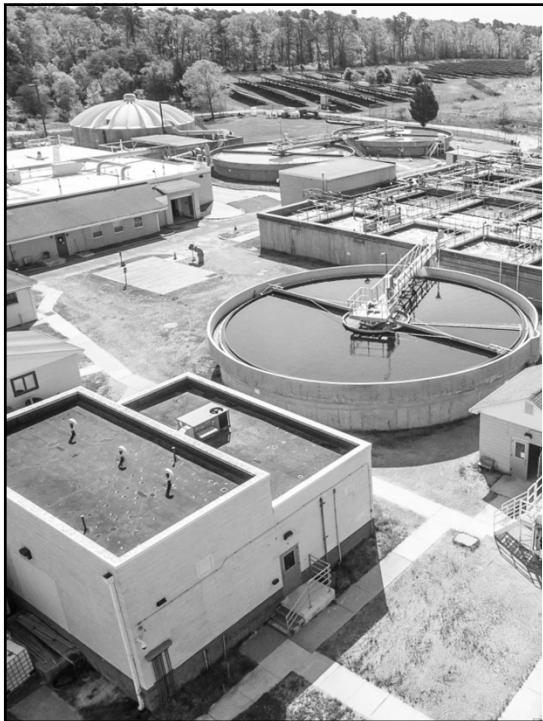
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5



Cost
Associated
with
Wastewater
Treatment

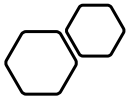
6

Treatment Cost	
MTUD Base Rate Cost Coverage	
Sewer Accounts	
Residential	21,017
Commercial / Industrial	398
Total	21,415

7

Treatment Cost			
<small>MTUD Base Rate Cost Coverage</small>			
<i>Permitted Limits to POTW</i>	<i>200 mg/l (BOD)</i>	<i>250 mg/l (TSS)</i>	
Tons (3.616 MGD avg. Flow Qtr. 2 2022)=	3.016	3.770	
Reported Average (2nd Qtr. 2022)	333 mg/l	500 mg/l	
Tons (3.616 MGD avg. Flow)=	5.021	7.539	
Exceedance (Tons)	2.005	3.770	
Cost per Day	\$1,011.50	\$2,179.82	\$3,191.32
Cost per month	\$30,344.96	\$65,394.52	\$95,739.49
Cost per year	\$369,197.06	\$795,633.37	\$1,164,830.43

8



What is the cause?
 -Lack of maintenance of
 grease trap and sample
 chamber

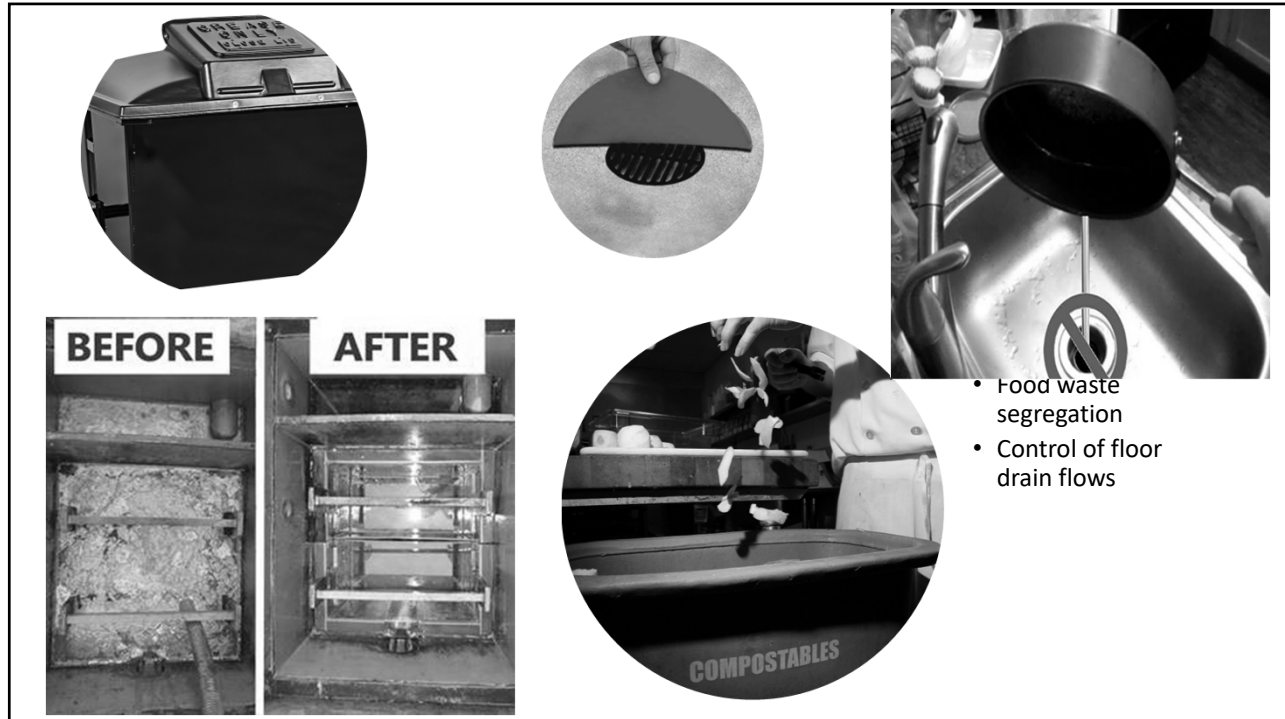
9



What is the cause?

- Causes
 - Illicit dumping of wastes
 - Uncontrolled floor drain flow
 - Poor solid waste control

10



11




12



Laboratory Analysis

13



Authority to Sample and Generate fees

- Monroe Township Municipal Ordinance:
 - Chapter 39-3J1.-Part I
 - Defines discharge limits
 - Defines prohibited discharges.
 - Gives detailed explanation of fees

14



New Customer Procedures

- New Industrial / commercial customers
 - Owner is advised of the program upon initiation of new account
 - 1 year waste characterization study begins
 - Beginning of 5th quarter, a meeting with owner and/or representative is offered.
 - Analytical data is shared.
 - Suggestions on waste or water use reduction is made.
 - Billing begins with 5th quarter results

15

Industrial / Commercial Sampling Program

When does it begin?

- Once the characterization phase of at least 1 years has ended.
- All results are currently being collected are being included in the next billing cycle.

What should I do to reduce the surcharges?

- Contact your tenants!
- Restaurants are more likely to produce the regulated wastes.
 - They need to maintain their grease trap and possible modify kitchen and housekeeping procedures.
- Any high-volume water user should be notified as well.
 - Water usage is used in the formula to determine the "tonnage" of waste produced.
- Have all tenants look into water conservation methods

This is NOT A PENALTY program

16

Industrial / Commercial Sampling Program

- Offset surcharges assessed to the Township by the MCUA
- What are we sampling for?
- MCUA Permit Limits
 - Biological Oxygen Demand (BOD) – Limit: 200 mg/l
 - Total Dissolved Solids (TSS) – Limit: 250 mg/l
 - Chlorine Demand – Limit: 15 mg/l
 - Oil & Grease - Limit: 100 mg/l (soon to be adopted)
- Under what authority are we doing this?
- Municipal Ordinance
- Chapter 39 describes the fees and surcharges associated with this program.

17

Review of Results

Location	Sample ID	Date of Sample	Time of Sample	Analysis	Result	Limit
Retail/ / Commercial	210728026-05	28-Jul-21	8:50 AM	BOD	1,120.00	200
	210728026-05	28-Jul-21	8:50 AM	Chlorine Demand	22.60	15
	210728026-05	28-Jul-21	8:50 AM	COD	2,293.90	<i>*report</i>
	210728026-05	28-Jul-21	8:50 AM	HEM	45.80	<i>*report</i>
	210728026-05	28-Jul-21	8:50 AM	TSS	220.00	250
	210812053-04	12-Aug-21	10:00 AM	BOD	1,420.00	200
	210812053-04	12-Aug-21	10:00 AM	Chlorine Demand	18.20	15
	210812053-04	12-Aug-21	10:00 AM	COD	1,673.53	<i>*report</i>
	210812053-04	12-Aug-21	10:00 AM	HEM	26.60	<i>*report</i>
	210812053-04	12-Aug-21	10:00 AM	TSS	196.00	250
	210928017-05	28-Sep-21	10:30 AM	BOD	2,530.00	200
	210928017-05	28-Sep-21	10:30 AM	Chlorine Demand	25.20	15
	210928017-05	28-Sep-21	10:30 AM	COD	3,725.50	<i>*report</i>
	210928017-05	28-Sep-21	10:30 AM	HEM	132.00	<i>*report</i>
	210928017-05	28-Sep-21	10:30 AM	TSS	1,100.00	250
				Average BOD:	1,690.00	mg/l
				Average Cl2 Demand:	22.00	mg/l
				Average TSS:	505.33	mg/l

18



Customer Invoicing

PHONE (732) 521-1700 (800) 655-1950

MONROE TOWNSHIP
UTILITY DEPARTMENT
143 UNION VALLEY ROAD
MONROE TOWNSHIP, NJ 08831

Billing For Commercial Use of Sewers

SURCHARGES

BOO	3.55 TONS @ 732.48 Per Ton Per Quarter	\$2,564.05
SUSPENDED SOLIDS	0.02 TONS @ 810.72 Per Ton Per Quarter	\$569.40
CHLORINE DEMAND	0.34 CWTS 245.81 Hundred Weight Per Quarter	\$63.92
		Sub Total \$3,207.37
LAB TEST CHARGES		
GRAB SAMPLE	3 @ 83.75 ea	\$251.25
COMPOSITE SAMPLE	@ 127.50 ea	\$127.50
OIL & GREASE	T @ 40.00 ea	\$40.00
		Previous balance \$8,487.99
		Interest on delinquency
		Grand Total \$10,026.61

BILLING PERIOD: JULY, AUG, SEPT 2021

BILL TO:

DUE DATE: 12/15/2021 ACCT. #

19



Customer Invoicing

SURCHARGE WORKSHEET

NAME	2021		IF BLANK DIDNT EXCEED LIMITS	
MONTHLY FLOWS	BOO [PPM]	SS [PPM]	CLD [CWT]	
JULY	0.196000	520	8	
AUG	0.196000	1220	3	
SEPT	0.196000	2330	850	10

FORMULA =	MG/MONTH	lbs/gal	PPM			
FORMULA =	FLOW X	8.34	X BOO	DIVIDED BY	2000	lbs/tons
FORMULA =	FLOW X	8.34	X SS	DIVIDED BY	2000	lbs/tons
FORMULA =	FLOW X	8.34	X CLD	DIVIDED BY	100	lbs/wt

JULY	BOO [TONS]	SS [TONS]	CLD [CWT]
JULY	0.75	0.00	0.13
AUG	1.00	0.00	0.05
SEPT	1.90	0.69	0.16
TOTALS	3.55	0.69	0.34

LAB CHARGES

20



Program Collection:
- 48 approved sample sites

2020: \$255,972.88

2021: \$280,730.11

Note: The cost of sampling and analysis also charged to customers and is not represented to this figure.

Customer Invoicing

21



Questions?

22