

CMOM – This is How You Write a Sewer Ordinance

December 1, 2023

**T&C Public Works Seminar
Lisa Twarog**

Outline

- CMOM Refresher
 - What is it?
 - Program Elements
 - Operation & Maintenance
- Sewer Ordinance
 - Industrial Users
 - Chlorides
 - Prohibited Discharges
 - Small Changes
- Takeaways

CMOM Refresher

What is CMOM?

- Capacity, Management, Operation, and Maintenance Program
- Required as of August 1, 2016

Program Elements

- Goals
- Organization
- Legal Authority
- Maintenance Activities
- Design & Performance Provisions
- Overflow Emergency Response Plan
- Capacity Assurance
- Annual Self-Audit

Operation and Maintenance Activities

Does your Collection System Annual Maintenance Program include the following activities? Check those items you have done in the last twelve months.

<input type="checkbox"/> Cleaning	(What % of system last year?)
<input type="checkbox"/> Root Removal	(What % of system last year?)
<input type="checkbox"/> Flow Monitoring	(What % of system last year?)
<input type="checkbox"/> Sewer Line Televising	(What % of system last year?)
<input type="checkbox"/> Manhole Inspections	(What % of total number of manholes last year?)
<input type="checkbox"/> Manhole Rehabilitation	(What % of total number of manholes rehabilitated last year?)
<input type="checkbox"/> Mainline Rehabilitation	(What % of sewer lines rehabilitated last year?)
<input type="checkbox"/> Private Sewer Inspections	(What % of system last year?)
<input type="checkbox"/> Private Sewer I/I Removal	(What % of system last year?)
<input type="checkbox"/> Lift Station O&M	(How many lift stations for the last year?)

Since every collection system is unique, work to find out which maintenance activities and frequencies will give you the best value for the O&M dollar spent. Recommended references for Collection System O&M Programs can be found on page 25.

Table 4.1: Collection System Routine Maintenance Schedule

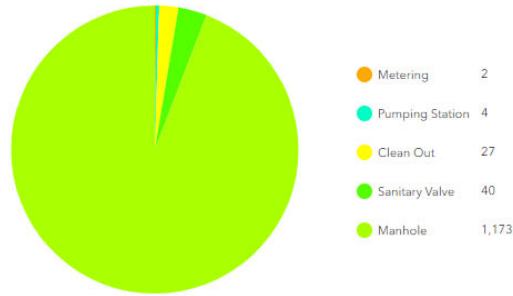
Description	Known Issues	Weekly	Monthly	Semiannually	Annually
Lift Stations	Grease build up and rags	Visual check for general condition, grease buildup, floats, transducers. Test pumps, alarm system, generator		Remove pumps for inspection and clean with vacuum truck	
(Lawrence Avenue Sewer)	Grease build up			Clean	
(Dental Amalgam Separators)					Check for proper operation & maintenance
Remainder of collection system	No known problems	L.S.-visual check for general condition, grease buildup, floats, transducers. Test pumps, alarm system, generator			Visual check for general condition and overflow evidence, clean 25% of the collection system and televise any areas with suspected problems

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Manhole Activity List (By Date Range And Manhole Activity Selected Above)

Activity	Cleaned/Inspected
Address #	
Adjustment Condition	Good
Adjustment Rings (in)	13.00
Altitude	289.02
Average Horizontal Accuracy (m)	
Average Vertical Accuracy (m)	
Averaged Positions	
Casting Diameter (in)	24.10
Casting Height	9
Casting Type	Eccentric
Chimney Seal	No
Clear Opening	21
Comment	Casting has a metal riser on top #1550-7151.
Comment	
Compass reading (°)	
Completed By	Village
Construction Type	Pre-Cast
Correction Age	
created_date	3/29/2021, 1:22 PM
created_user	villageoregon
CreationDate	2/15/2023, 1:05 PM
Creator	owater
Cross Street	
Date Completed	2/15/2023, 1:05 PM
Depth (ft)	7.60
Direction of travel (°)	
EditDate	2/15/2023, 1:05 PM
Editor	owater
Elevation	948.23
Estimated Leakage	
Fix Time	7/24/2015, 2:02 PM
Fix Type	
Flow Conditions	No flow.
Flowline	Formed
Gasketed	Yes
General Condition	Good
HDOP	
Horizontal Accuracy (m)	1.51
ID	250
Inside Diameter	23.1
Invert Depths	Outlet pipe 8.31 ft.
last_edited_date	1/30/2023, 2:22 PM
last_edited_user	owwtp1
Latitude	42.94
Leakage	No

Sanitary Objects (Village Owned)



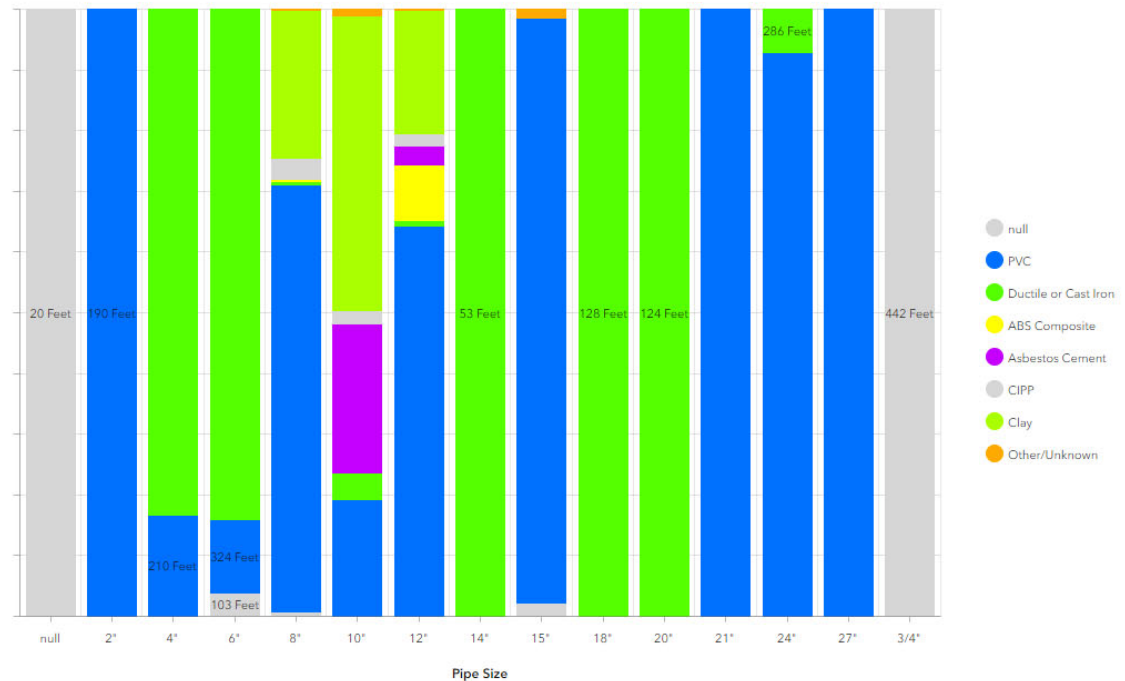
Manhole Totals From Date Range and Activity Selected Above:

488
41.60%
Total Manholes: 1,173

Sanitary Objects (Village)

Manhole Query

Gravity Sewer Totals (Village Owned)



Manhole Query List

Pipe Query List

Gravity Sewer

Force Main

Pipe Totals (Miles)

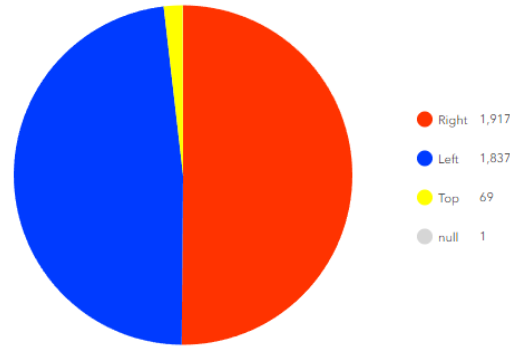
Non-Village Owned Pipes

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ID	250
Inside Diameter	23.1
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Latitude	42.94
Leakage	No

Sanitary Taps



Sanitary Sewer
Cleaned This Year

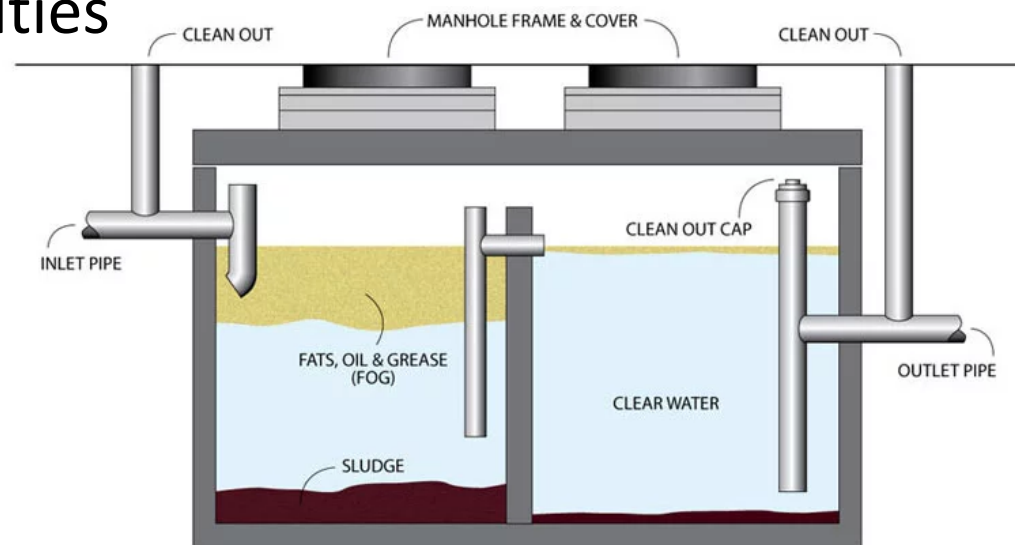
137,903 feet
47.79%
Total Sewer: 288,555 feet

Sanitary Sewer Totals (Ownership)

54.65 miles (Village)
3.53 miles (Non-Village)

Grease Traps

- Responsibility
- Authority to inspect grease traps & corresponding businesses
- Grease Trap Monitoring Program (Oconomowoc)
 - Yearly Maintenance Reports
 - Penalties



Don't let this be you!



<https://www.businessinsider.com/grease-drain-explainer-process-sewer-fatbergs-flooding-london-2017-5>

Capacity Assurance

Check those documents you have.

- Current and up-to-date sewer maps
- Sewer system plans and specifications
- Manhole location maps with numbered manholes and GPS coordinates
- Lift station pump and wet well capacity information
- Lift station O&M manuals

Check those items you have identified within your sewer system.

- Areas with flat sewers
- Areas with surcharging
- Areas with bottlenecks or constrictions
- Areas with chronic basement backups or sanitary sewer overflows (SSOs)
- Areas with excess debris, solids or grease accumulation
- Areas with heavy root growth
- Areas with excessive infiltration/inflow (I/I)
- Sewers and manholes with severe corrosion
- Sewers with severe defects that affect flow capacity
- Adequacy of capacity for new connections
- Lift station capacity and/or pumping problems
- Wet weather relief points or overflow structures (if any)

Self-Auditing Your CMOM

- CMAR
- EPA – CMOM Program Self-Assessment Checklist

COMPLIANCE MAINTENANCE ANNUAL REPORT

Facility Name: Flushing, WI Last Updated: Reporting Year: 2009

WPDES No. 0047341

GRADING SUMMARY				
SECTION	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Financial Management	A	4.0	1	4
Collection Systems	A	4.0	3	12
TOTAL			4	16
GRADE POINT AVERAGE (GPA) = 4.0		4.00		

Notes:

A = Voluntary Range

B = Voluntary Range

C = Recommendation Range (Response Required)

D = Action Range (Response Required)

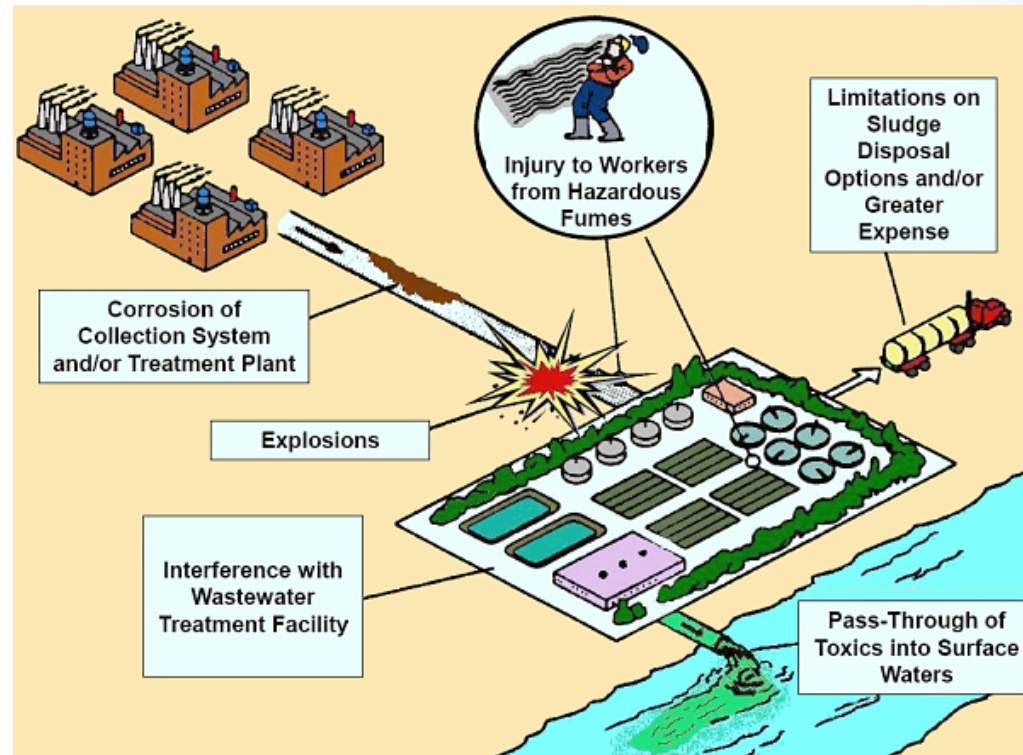
F = ActionRange (Response Required)



Using Your Ordinance to Protect the WWTF and Collection System

Industrial Users

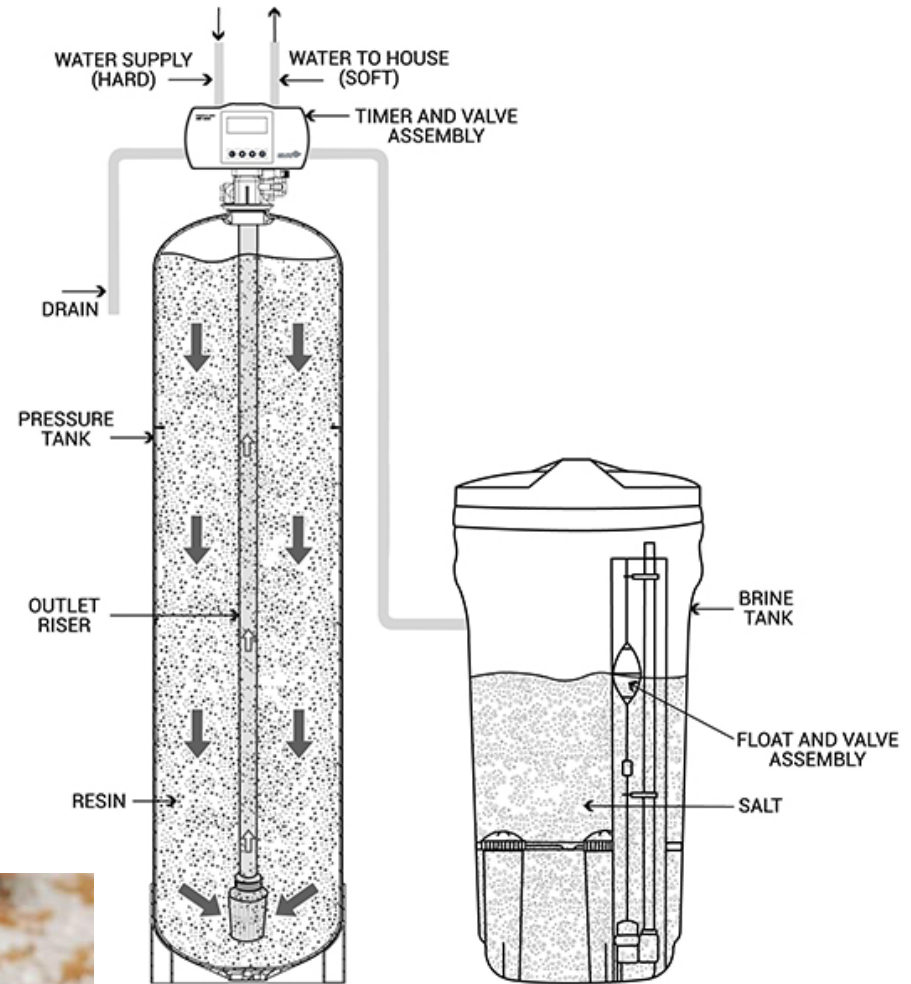
- Pretreatment
- Sampling & monitoring
- Permit
 - ADLs
 - Capital Cost Share
- Billing



Oklahoma Department of Environmental Quality

Chlorides

- Hose Bibbs
- Cold Water
- Softener Requirements
- Softener Rebate Program
- Inspections



Water Softener Replacement Rebate Application Form

- Rebates available to all residential sewer customers of Waterloo Utilities. Subject to available program funding, please call to confirm funding availability.
- Applicant must replace a working timer-based self regenerating water softener with a demand initiated regeneration (DIR) water softener.
- Application must be submitted with a copy of the sales receipt.
- Offer is limited to one (1) water softener rebate per single family home, condominium, apartment or manufactured home.
- Waterloo Utilities reserves the right to verify customer eligibility, water softener sale and installation before rebate is issued.
- Upon receipt of application, qualification will be verified and you will be contacted to schedule a post installation inspection. Waterloo Utilities will inspect softeners Monday through Friday 7:30am-4pm.
- The rebate will be in the form of a bill credit applied towards future bills.
- Rebate up to 50% of the cost of the DIR water softener not to exceed \$400.
- With submittal of an application, water-sewer system customers agree to not re-install the self regenerating water softener at any time in the future.

Prohibited Discharges

- Future Contaminants
- Flushable Wipes
- Privies, Cesspools, Holding Tanks, Port-a-Potties



Small Changes

- Connections Required for ALL Buildings
- Front – Back Door Extension for Development
- Remove Fee Schedules
- Accidental Discharges

Takeaways

- CMOM provides a gameplan for taking care of your collection system
- Having an up-to-date ordinance provides legal protections for your WWTF and Collection System
 - There are easy updates you can make to maximize protections

Questions?

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Town and Country Engineering

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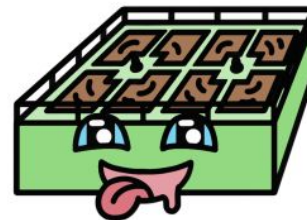
What's your Wastewater Treatment Personality?



**Calm like a
Secondary Clarifier**



**Bubbly like an
aeration tank**



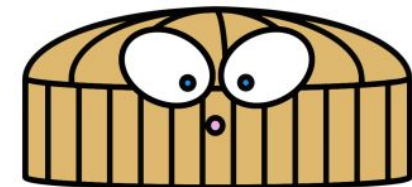
**Hungry like the bacteria
in an anoxic tank**



**Baffled like a chlorine
contact chamber**



**Clean and prepared
with the right PPE
like a UV system**



**Full of crap like an
anaerobic digester**

Idea by Shea Dunifon Art by Mallory Gabrielle Clayton "Scarf The Squirrel" 