Compliance Maintenance Annual Report

Milwaukee Ms4 And Sewage Collection System

Last Updated: 5/28/2025 Reporting For: **2024**

Financial Management

1. Provider of Financial Information

Name: Kurt Sprangers

Telephone: (414) 286-0515 (XXX) XXX-XXXX

E-Mail Address (optional): kspran@milwaukee.gov

2. Treatment Works Operating Revenues

2.1 Are User Charges or other revenues sufficient to cover O&M expenses for your wastewater treatment plant AND/OR collection system ?

- ● Yes (0 points) ☐☐
- ○ No (40 points)

If No, please explain:

2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised?

Year: 2022

- ● 0-2 years ago (0 points) ☐☐
- ○ 3 or more years ago (20 points)☐☐
- ○ N/A (private facility)

2.3 Did you have a special account (e.g., CWFP required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system?

- ● Yes (0 points)
- ○ No (40 points)

0

REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]

3. Equipment Replacement Funds

3.1 When was the Equipment Replacement Fund last reviewed and/or revised?

Year: 2023

- ● 1-2 years ago (0 points)☐☐
- ○ 3 or more years ago (20 points)☐☐
- ○ N/A

If N/A, please explain:

3.2 Equipment Replacement Fund Activity

3.2.1 Ending Balance Reported on Last Year's CMAR		$ 300,000.00
3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)		$ 0.00
3.2.3 Adjusted January 1st Beginning Balance		$ 300,000.00
3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	+	$ 1,793,000.00

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3.2.5 Subtractions from Fund (e.g., equipment replacement, major repairs - use description box 3.2.6.1 below*) - $ 1,793,000.00

3.2.6 Ending Balance as of December 31st for CMAR Reporting Year $ 300,000.00

All Sources: This ending balance should include all Equipment Replacement Funds whether held in a bank account(s), certificate(s) of deposit, etc.

3.2.6.1 Indicate adjustments, equipment purchases, and/or major repairs from 3.2.5 above.

1) Rehab and/or repair pumps and generators and 2) Purchase of several maintenance equipment: jet nozzles, gas monitors, sewer cleaner vac jet and two vehicles and 3) Purchase of safety equipment and safety harnesses.

0

3.3 What amount should be in your Replacement Fund? $ 300,000.00

Please note: If you had a CWFP loan, this amount was originally based on the Financial Assistance Agreement (FAA) and should be regularly updated as needed. Further calculation instructions and an example can be found by clicking the SectionInstructions link under Info header in the left-side menu.

3.3.1 Is the December 31 Ending Balance in your Replacement Fund above, (#3.2.6) equal to, or greater than the amount that should be in it (#3.3)?

- ● Yes
- ○ No

If No, please explain.

4. Future Planning

4.1 During the next ten years, will you be involved in formal planning for upgrading, rehabilitating, or new construction of your treatment facility or collection system?

- ● Yes - If Yes, please provide major project information, if not already listed below.☐☐
- ○ No

Project #	Project Description	Estimated Cost	Approximate Construction Year
1	The City of Milwaukee has an ongoing sewer replacement and I/I reduction program. From 2024 to 2029, our six year Capital Improvement Program is $129,700,000. This amount is for replacement of the City's combined, sanitary and storm sewers. Of that amount, approximately $1,500,000 is budgeted for the sanitary sewer system rehabilitation each year.	$1,500,000	2024

5. Financial Management General Comments

The City's budget is based on the calendar year, January 1st to December 31st.

ENERGY EFFICIENCY AND USE

6. Collection System

6.1 Energy Usage

6.1.1 Enter the monthly energy usage from the different energy sources:

COLLECTION SYSTEM PUMPAGE: Total Power Consumed

Number of Municipally Owned Pump/Lift Stations: 90

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	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	11,858	22
February	10,549	8
March	10,980	8
April	11,017	10
May	9,569	8
June	8,768	12
July	9,842	10
August	8,212	20
September	9,074	13
October	9,449	11
November	9,043	15
December	10,710	14
Total	**119,071**	**151**
Average	**9,923**	**13**

6.1.2 Comments:

6.2 Energy Related Processes and Equipment

6.2.1 Indicate equipment and practices utilized at your pump/lift stations (Check all that apply):

- ☒ Comminution or Screening
- ☐ Extended Shaft Pumps
- ☐ Flow Metering and Recording
- ☐ Pneumatic Pumping
- ☒ SCADA System
- ☐ Self-Priming Pumps
- ☐ Submersible Pumps
- ☐ Variable Speed Drives
- ☒ Other:

Electric heater

6.2.2 Comments:

6.3 Has an Energy Study been performed for your pump/lift stations?

- ● No
- ○ Yes

Year:

By Whom:

Describe and Comment:

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6.4 Future Energy Related Equipment

6.4.1 What energy efficient equipment or practices do you have planned for the future for your pump/lift stations?

a) Monthly inspections and monitoring result in early identification of unexpected increases in energy usage, which can be investigate and corrected immediately.
b) Annual pump rehabilitation projects replaces old equipment with new potentially more energy efficient equipment.

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

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Sanitary Sewer Collection Systems

1. Capacity, Management, Operation, and Maintenance (CMOM) Program

1.1 Do you have a CMOM program that is being implemented?

- ● Yes
- ○ No

If No, explain:

1.2 Do you have a CMOM program that contains all the applicable components and items according to Wisc. Adm Code NR 210.23 (4)?

- ● Yes
- ○ No (30 points)
- ○ N/A

If No or N/A, explain:

1.3 Does your CMOM program contain the following components and items? (check the components and items that apply)

☒ Goals [NR 210.23 (4)(a)]

Describe the major goals you had for your collection system last year:

To efficiently collect and convey all of our customers' wastewater in the most cost effective manner while remaining in compliance with WPDES permits, Clean Water Act, Wisconsin Law, and MMSD Rules and Regulations.

Did you accomplish them?

- ● Yes
- ○ No

If No, explain:

☒ Organization [NR 210.23 (4) (b)]☐☐

Does this chapter of your CMOM include:

- ☒ Organizational structure and positions (eg. organizational chart and position descriptions)
- ☒ Internal and external lines of communication responsibilities
- ☒ Person(s) responsible for reporting overflow events to the department and the public

☒ Legal Authority [NR 210.23 (4) (c)]

What is the legally binding document that regulates the use of your sewer system?

City of Milwaukee Ordinance

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 2016-12-13

Does your sewer use ordinance or other legally binding document address the following:

- ☒ Private property inflow and infiltration
- ☒ New sewer and building sewer design, construction, installation, testing and inspection
- ☒ Rehabilitated sewer and lift station installation, testing and inspection
- ☐ Sewage flows satellite system and large private users are monitored and controlled, as necessary
- ☒ Fat, oil and grease control
- ☒ Enforcement procedures for sewer use non-compliance

☒ Operation and Maintenance [NR 210.23 (4) (d)]

Does your operation and maintenance program and equipment include the following:

- ☒ Equipment and replacement part inventories
- ☒ Up-to-date sewer system map

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☒A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation
☒ A description of routine operation and maintenance activities (see question 2 below)
☒ Capacity assessment program
☒ Basement back assessment and correction
☒ Regular O&M training
☒ Design and Performance Provisions [NR 210.23 (4) (e)]☐☐
What standards and procedures are established for the design, construction, and inspection of the sewer collection system, including building sewers and interceptor sewers on private property?
☒ State Plumbing Code, DNR NR 110 Standards and/or local Municipal Code Requirements
☒ Construction, Inspection, and Testing
☒ Others:

MMSD Guidelines

☒ Overflow Emergency Response Plan [NR 210.23 (4) (f)]☐☐
Does your emergency response capability include:
☒ Responsible personnel communication procedures
☒ Response order, timing and clean-up
☒ Public notification protocols
☒ Training
☒ Emergency operation protocols and implementation procedures
☒ Annual Self-Auditing of your CMOM Program [NR 210.23 (5)]☐☐
☒ Special Studies Last Year (check only those that apply):
☒ Infiltration/Inflow (I/I) Analysis
☐ Sewer System Evaluation Survey (SSES)
☐ Sewer Evaluation and Capacity Managment Plan (SECAP)
☒ Lift Station Evaluation Report
☐ Others:

0

2. Operation and Maintenance

2.1 Did your sanitary sewer collection system maintenance program include the following maintenance activities? Complete all that apply and indicate the amount maintained.

Cleaning	34.1	% of system/year
Root removal	5	% of system/year
Flow monitoring	11.9	% of system/year
Smoke testing	0.15	% of system/year
Sewer line televising	5.57	% of system/year
Manhole inspections	25.6	% of system/year
Lift station O&M	10	# per L.S./year
Manhole rehabilitation	0	% of manholes rehabbed
Mainline rehabilitation	0.5	% of sewer lines rehabbed
Private sewer inspections	0	% of system/year

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Private sewer I/I removal	0	% of private services
River or water crossings	0	% of pipe crossings evaluated or maintained

Please include additional comments about your sanitary sewer collection system below:

3. Performance Indicators

3.1 Provide the following collection system and flow information for the past year.

38.75	Total actual amount of precipitation last year in inches
34.57	Annual average precipitation (for your location)
949	Miles of sanitary sewer
7	Number of lift stations
0	Number of lift station failures
0	Number of sewer pipe failures
32	Number of basement backup occurrences
3456	Number of complaints
	Average daily flow in MGD (if available)
	Peak monthly flow in MGD (if available)
	Peak hourly flow in MGD (if available)

3.2 Performance ratios for the past year:

0.00	Lift station failures (failures/year)
0.00	Sewer pipe failures (pipe failures/sewer mile/yr)
0.00	Sanitary sewer overflows (number/sewer mile/yr)
0.03	Basement backups (number/sewer mile)
3.64	Complaints (number/sewer mile)
	Peaking factor ratio (Peak Monthly:Annual Daily Avg)
	Peaking factor ratio (Peak Hourly:Annual Daily Avg)

4. Overflows

LIST OF SANITARY SEWER (SSO) AND TREATMENT FACILITY (TFO) OVERFLOWS REPORTED **

	Date	Location	Cause	Estimated Volume
0	3/14/2024 2:41:00 PM - 3/14/2024 2:44:00 PM	N. 87th St. & W. Center St. (Permit No. 204)	Rain, Plugged Sewer	4,817
1	8/1/2024 8:45:00 PM - 8/1/2024 8:58:00 PM	S. 99th St. & W. Oklahoma Ave. (Permit No. 74)	Rain	22,837

** If there were any SSOs or TFOs that are not listed above, please contact the DNR and stop work on this section until corrected.

What actions were taken, or are underway, to reduce or eliminate SSO or TFO occurences in the future?

The City continues to 1) Implement aggressive inflow and infiltration reduction programs, and 2) Clean and televise its sanitary sewer system to identify and prevent blockages.

5. Infiltration / Inflow (I/I)

5.1 Was infiltration/inflow (I/I) significant in your community last year?

○ Yes

● No

If Yes, please describe:

5.2 Has infiltration/inflow and resultant high flows affected performance or created problems in your collection system, lift stations, or treatment plant at any time in the past year?

○ Yes

● No

If Yes, please describe:

5.3 Explain any infiltration/inflow (I/I) changes this year from previous years:

There are no I/I changes from the previous year.

5.4 What is being done to address infiltration/inflow in your collection system?

1. Flow monitoring 2. Manhole inspection 3. Manhole rehabilitation 4. Sanitary sewer lining projects 5. Working with MMSD on the 2020 Facilities Plan.

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

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Grading Summary

WPDES No: 0047341

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Financial	A	4	1	4
Collection	A	4	3	12
TOTALS			**4**	**16**
GRADE POINT AVERAGE (GPA) = 4.00				

Notes:
A = Voluntary Range (Response Optional)
B = Voluntary Range (Response Optional)
C = Recommendation Range (Response Required)
D = Action Range (Response Required)
F = Action Range (Response Required)