

Compliance Maintenance Annual Report

Village of North Freedom
Resolution 2024-004 - 2023 CMAR

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/7/2024 2023

Influent Flow and Loading

1. Monthly Average Flows and BOD Loadings

1.1 Verify the following monthly flows and BOD loadings to your facility.

Influent No. 701	Influent Monthly Average Flow, MGD	x	Influent Monthly Average BOD Concentration mg/L	x	8.34	=	Influent Monthly Average BOD Loading, lbs/day
January	0.0658	x	305	x	8.34	=	167
February	0.0568	x	265	x	8.34	=	126
March	0.0677	x	160	x	8.34	=	90
April	0.1707	x	165	x	8.34	=	235
May	0.0632	x	245	x	8.34	=	129
June	0.0442	x	290	x	8.34	=	107
July	0.0387	x		x	8.34	=	
August	0.0378	x	170	x	8.34	=	54
September	0.0364	x	265	x	8.34	=	80
October	0.0472	x	295	x	8.34	=	116
November	0.0314	x	305	x	8.34	=	80
December	0.0367	x	240	x	8.34	=	74

2. Maximum Monthly Design Flow and Design BOD Loading

2.1 Verify the design flow and loading for your facility.

Design	Design Factor	x	%	=	% of Design
Max Month Design Flow, MGD	.07	x	90	=	0.063
		x	100	=	.07
Design BOD, lbs/day	133	x	90	=	119.7
		x	100	=	133

2.2 Verify the number of times the flow and BOD exceeded 90% or 100% of design, points earned, and score:

	Months of Influent	Number of times flow was greater than 90% of	Number of times flow was greater than 100% of	Number of times BOD was greater than 90% of design	Number of times BOD was greater than 100% of design
January	1	1	0	1	1
February	1	0	0	1	0
March	1	1	0	0	0
April	1	1	1	1	1
May	1	1	0	1	0
June	1	0	0	0	0
July	1	0	0	0	0
August	1	0	0	0	0
September	1	0	0	0	0
October	1	0	0	0	0
November	1	0	0	0	0
December	1	0	0	0	0
Points per each		2	1	3	2
Exceedances		4	1	4	2
Points		8	1	12	4
Total Number of Points					25

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3. Flow Meter

3.1 Was the influent flow meter calibrated in the last year?

☒ Yes

Enter last calibration date (MM/DD/YYYY)

2023-10-18

☐ No

If No, please explain:

4. Sewer Use Ordinance

4.1 Did your community have a sewer use ordinance that limited or prohibited the discharge of excessive conventional pollutants ((C)BOD, SS, or pH) or toxic substances to the sewer from industries, commercial users, hauled waste, or residences?

☒ Yes

☐ No

If No, please explain:

4.2 Was it necessary to enforce the ordinance?

☐ Yes

☒ No

If Yes, please explain:

5. Septage Receiving

5.1 Did you have requests to receive septage at your facility?

Septic Tanks

Holding Tanks

Grease Traps

☐ Yes

☐ Yes

☐ Yes

☒ No

☒ No

☒ No

5.2 Did you receive septage at your facility? If yes, indicate volume in gallons.

Septic Tanks

☐ Yes

gallons

☒ No

Holding Tanks

☐ Yes

gallons

☒ No

Grease Traps

☐ Yes

gallons

☒ No

5.2.1 If yes to any of the above, please explain if plant performance is affected when receiving any of these wastes.

6. Pretreatment

6.1 Did your facility experience operational problems, permit violations, biosolids quality concerns, or hazardous situations in the sewer system or treatment plant that were attributable to commercial or industrial discharges in the last year?

☐ Yes

☒ No

If yes, describe the situation and your community's response.

6.2 Did your facility accept hauled industrial wastes, landfill leachate, etc.?

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☐ Yes

☒ No

If yes, describe the types of wastes received and any procedures or other restrictions that were in place to protect the facility from the discharge of hauled industrial wastes.

Total Points Generated	25
Score (100 - Total Points Generated)	75
Section Grade	C

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Effluent Quality and Plant Performance (BOD/CBOD)

1. Effluent (C)BOD Results

1.1 Verify the following monthly average effluent values, exceedances, and points for BOD or CBOD

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit > 10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	30	27	8	1	0	0
February	30	27	29	1	0	1
March	30	27	27	1	0	0
April	30	27	12	1	0	0
May	30	27	31	1	1	1
June	30	27	20	1	0	0
July	30	27				
August	30	27	24	1	0	0
September	30	27	17	1	0	0
October	30	27	36	1	1	1
November	30	27	20	1	0	0
December	30	27	16	1	0	0

* Equals limit if limit is ≤ 10

Months of discharge/yr	11		
Points per each exceedance with 11 months of discharge		8	3
Exceedances		2	3
Points		16	9
Total number of points			25

25

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge. Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

Due to seasonal changes, we continued to do general maintenance. There was also a problem with the chemical treatment pump as it failed. Recalibrated and reinstalled with contractor.

2. Flow Meter Calibration

2.1 Was the effluent flow meter calibrated in the last year?

● Yes

Enter last calibration date (MM/DD/YYYY)

2023-10-18

○ No

If No, please explain:

3. Treatment Problems

3.1 What problems, if any, were experienced over the last year that threatened treatment?

Weather/Precipitation.
Chemical pump failure.

4. Other Monitoring and Limits

4.1 At any time in the past year was there an exceedance of a permit limit for any other pollutants such as chlorides, pH, residual chlorine, fecal coliform, or metals?

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☐ Yes

☒ No

If Yes, please explain:

4.2 At any time in the past year was there a failure of an effluent acute or chronic whole effluent toxicity (WET) test?

☐ Yes

☒ No

If Yes, please explain:

4.3 If the biomonitoring (WET) test did not pass, were steps taken to identify and/or reduce source(s) of toxicity?

☐ Yes

☐ No

☒ N/A

Please explain unless not applicable:

Total Points Generated	25
Score (100 - Total Points Generated)	75
Section Grade	C

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Effluent Quality and Plant Performance (Total Suspended Solids)

1. Effluent Total Suspended Solids Results

1.1 Verify the following monthly average effluent values, exceedances, and points for TSS:

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit >10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	60	54	13	1	0	0
February	60	54	51	1	0	0
March	60	54	35	1	0	0
April	60	54	27	1	0	0
May	60	54	34	1	0	0
June	60	54	25	1	0	0
July	60	54				
August	60	54	80	1	1	1
September	60	54	49	1	0	0
October	60	54	49	1	0	0
November	60	54	31	1	0	0
December	60	54	27	1	0	0

* Equals limit if limit is <= 10

Months of Discharge/yr	11		
Points per each exceedance with 11 months of discharge:		8	3
Exceedances		1	1
Points		8	3
Total Number of Points			11

11

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

General Maintenance - Pond mowing.

Total Points Generated	11
Score (100 - Total Points Generated)	89
Section Grade	B

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Effluent Quality and Plant Performance (Ammonia - NH3)

1. Effluent Ammonia Results

1.1 Verify the following monthly and weekly average effluent values, exceedances and points for ammonia

Outfall No. 001	Monthly Average NH3 Limit (mg/L)	Weekly Average NH3 Limit (mg/L)	Effluent Monthly Average NH3 (mg/L)	Monthly Permit Limit Exceed ance	Effluent Weekly Average for Week 1	Effluent Weekly Average for Week 2	Effluent Weekly Average for Week 3	Effluent Weekly Average for Week 4	Weekly Permit Limit Exceed ance
January	108	108	7.55	0	5.8	7	8	9.4	0
February	108	108	12.75	0	11.5	14	14		0
March	108	108	14.75	0		15	15	14	0
April	108	108	9.15	0	13	11	7.8	4.8	0
May	108	108	6.475	0	3.9	9.2	5.3	7.5	0
June	108	108	.963	0	0	1.7	.45	1.7	0
July	108	108		0					0
August	108	108	9.5	0	5.5		11.5		0
September	108	108	7.75	0	0	9	11	11	0
October	108	108	9.65	0	12	10	9	7.6	0
November	108	108	5.475	0		6.5	5.35	4.7	0
December	108	108	5.7	0	6.4	5.2	5.3	5.9	0
Points per each exceedance of Monthly average:									10
Exceedances, Monthly:									0
Points:									0
Points per each exceedance of weekly average (when there is no monthly average):									2.5
Exceedances, Weekly:									0
Points:									0
Total Number of Points									0

NOTE: Limit exceedances are considered for monthly OR weekly averages but not both. When a monthly average limit exists it will be used to determine exceedances and generate points. This will be true even if a weekly limit also exists. When a weekly average limit exists and a monthly limit does not exist, the weekly limit will be used to determine exceedances and generate points.

1.2 If any violations occurred, what action was taken to regain compliance?

0

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

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Effluent Quality and Plant Performance (Phosphorus)

1. Effluent Phosphorus Results

1.1 Verify the following monthly average effluent values, exceedances, and points for Phosphorus

Outfall No. 001	Monthly Average phosphorus Limit (mg/L)	Effluent Monthly Average phosphorus (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance
January	4.5	2.200	1	0
February	4.5	2.850	1	0
March	4.5	2.175	1	0
April	4.5	0.925	1	0
May	4.5	0.375	1	0
June	4.5	0.415	1	0
July	4.5			
August	4.5	1.767	1	0
September	4.5	1.140	1	0
October	4.5	1.625	1	0
November	4.5	0.840	1	0
December	4.5	0.580	1	0
Months of Discharge/yr			11	
Points per each exceedance with 11 months of discharge:				11
Exceedances				0
Total Number of Points				0

NOTE: For systems that discharge intermittently to waters of the state, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

--

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

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Ponds And Lagoon Leakage

1. Pond Lining

1.1 What material was used to line your ponds?

Primary - Bentonite Clay

Secondary - PVC

2. Flow Measurements

2.1 Did you measure influent flow to your wastewater ponds or lagoons?

• Yes (0 points) ☐

○ No (40 points) (Go to question 6) ☐

2.1.1 Method of influent flow measurement:

Pump run time X calculated pump GPM

2.2 Did you measure effluent flow discharged from your wastewater system either to the land disposal system or to the receiving stream?

• Yes (0 points) ☐

○ No (40 points) (Go to question 6) ☐

○ No Discharge (0 points)

2.2.1 Method of effluent flow measurement:

Parshall flume w/ ultrasonic level

0

3. Total Flow Volumes

3.1 Total monthly influent and effluent flow volumes from the pond/lagoon system during the last calendar year.

Total Monthly Influent Volume		Total Monthly Effluent Volume
2.0405	JANUARY	1.34
1.5905	FEBRUARY	1.1779
2.0986	MARCH	2.089
5.1223	APRIL	1.964
1.9595	MAY	.698
1.3246	JUNE	0
1.2008	JULY	0
1.1706	AUGUST	.383
1.0909	SEPTEMBER	.076
1.4632	OCTOBER	.902
.9413	NOVEMBER	.633
1.1389	DECEMBER	1.051
21.1417	YEARLY TOTAL	10.3139

3.2 From the Yearly Total influent and effluent volumes above, total effluent is divided by total influent and converted to a percent of volume loss.

Total effluent, MG => 10.3139

----- = 0.488 <= effl / infl ratio

Total influent, MG => 21.1417

Conversion to a percent of volume loss:

$(1 - \text{effl} / \text{infl ratio}) * 100 = 51.2$

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% of influent lost and not discharged with effluent													
4. Surface Area													
4.1 What was the total wastewater surface area of the ponds/lagoons at operating level (do not include seepage cells)?													
<div style="border: 1px solid black; width: 150px; height: 20px; display: flex; align-items: center; padding: 2px;">9</div>	Acres												
5. Leakage Rate Estimation													
5.1 Total influent volume (in MG) minus total effluent volume (in MG) plus or minus the change in pond/lagoon storage (in MG) is the net wastewater loss. The net loss divided by 0.000365 equals the estimated leakage amount in gpd.													
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 40%;">Total Annual Influent (MG)</th><th style="width: 20%;">21.1417</th><th style="width: 40%;"></th></tr></thead><tbody><tr><td>Total Annual Effluent (MG)</td><td>10.3139</td><td></td></tr><tr><td>Estimated Net Loss (MG)</td><td>10.8278</td><td></td></tr><tr><td>Estimated Leakage Amount (gpd)</td><td></td><td>29665</td></tr></tbody></table>		Total Annual Influent (MG)	21.1417		Total Annual Effluent (MG)	10.3139		Estimated Net Loss (MG)	10.8278		Estimated Leakage Amount (gpd)		29665
Total Annual Influent (MG)	21.1417												
Total Annual Effluent (MG)	10.3139												
Estimated Net Loss (MG)	10.8278												
Estimated Leakage Amount (gpd)		29665											
If you have a *Department approved* method for determining a change in storage volume, enter the storage change last year in MG below.													
o Storage Increase: Enter amount in MG -> <div style="border: 1px solid black; width: 150px; height: 20px; display: flex; align-items: center;"></div>													
o Storage Decrease: Enter amount in MG -> <div style="border: 1px solid black; width: 150px; height: 20px; display: flex; align-items: center;"></div>													
5.2 CMAR Estimated Leakage Rate in gallons per acre per day (gpac): The CMAR Estimated Leakage Rate in gpac is the leakage amount in gpd (from part 5.1) divided by the total pond surface area (from question 4).													
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 20%;">Leakage Amount (gpd)</th><th style="width: 10%;"></th><th style="width: 20%;">Acres</th><th style="width: 10%;"></th><th style="width: 40%;">CMAR Estimated Leakage Rate</th></tr></thead><tbody><tr><td>29665</td><td>divided by</td><td>9</td><td>=</td><td>3296</td></tr></tbody></table>		Leakage Amount (gpd)		Acres		CMAR Estimated Leakage Rate	29665	divided by	9	=	3296		
Leakage Amount (gpd)		Acres		CMAR Estimated Leakage Rate									
29665	divided by	9	=	3296									
6. On Site Leakage Testing													
6.1 Did you conduct an on-site, field water balance/leakage test on your ponds or lagoons that was approved by the Department and is still valid?													
o Yes Year <div style="border: 1px solid black; width: 150px; height: 20px; display: flex; align-items: center;"></div>													
● No													
If yes, what was the field Test Calculated Leakage Rate for your ponds/lagoons?													
<div style="border: 1px solid black; width: 150px; height: 20px; display: flex; align-items: center;"></div> gpac													
NOTE: if 6.1 is answered Yes, the value entered above in gpac will be used in 7.1 to compute points generated.													
6.2 Leakage Rate Comments:													
<div style="border: 1px solid black; height: 20px;"></div>													
7. Estimated Leakage Rate and Points													
7.1 The CMAR Estimated Leakage Rate (from 5) is used to determine the points generated in the table below.													
If an approved field test was conducted and the results are still valid and accepted by the Department, the Field Calculated Leakage rate (from 5.2) is used to determine the points earned from the table below													

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gpad	points
0 - 1,000	0
1,001 - 2,000	10
2,001 - 4,000	20
4,001 - 7,000	30
> 7,000	40

20

Based on the leakage rate in gpad, the points earned are:

Total Points Generated	20
Score (100 - Total Points Generated)	80
Section Grade	C

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Biosolids Quality and Management

1. Biosolids Use/Disposal

1.1 How did you use or dispose of your biosolids? (Check all that apply)

- ☐ Land applied under your permit
- ☐ Publicly Distributed Exceptional Quality Biosolids
- ☐ Hauled to another permitted facility
- ☐ Landfilled
- ☐ Incinerated
- ☒ Other

NOTE: If you did not remove biosolids from your system, please describe your system type such as lagoons, reed beds, recirculating sand filters, etc.

1.1.1 If you checked Other, please describe:

Did not remove biosolids

6. Biosolids Storage

6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site?

- ☒ >= 180 days (0 Points)
- ☐ 150 - 179 days (10 Points)
- ☐ 120 - 149 days (20 Points)
- ☐ 90 - 119 days (30 Points)
- ☐ < 90 days (40 Points)
- ☐ N/A (0 Points)

0

6.2 If you checked N/A above, explain why.

7. Issues

7.1 Describe any outstanding biosolids issues with treatment, use or overall management:

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

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Staffing and Preventative Maintenance (All Treatment Plants)

1. Plant Staffing

1.1 Was your wastewater treatment plant adequately staffed last year?

● Yes

○ No

If No, please explain:

Could use more help/staff for:

1.2 Did your wastewater staff have adequate time to properly operate and maintain the plant and fulfill all wastewater management tasks including recordkeeping?

● Yes

○ No

If No, please explain:

2. Preventative Maintenance

2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items?

● Yes (Continue with question 2) ☐☐

○ No (40 points) ☐☐

If No, please explain, then go to question 3:

2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment?

● Yes

○ No (10 points)

2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly?

● Yes

○ Paper file system

○ Computer system

● Both paper and computer system

○ No (10 points)

0

3. O&M Manual

3.1 Does your plant have a detailed O&M and Manufacturer Equipment Manuals that can be used as a reference when needed?

● Yes

○ No

4. Overall Maintenance /Repairs

4.1 Rate the overall maintenance of your wastewater plant.

○ Excellent

○ Very good

● Good

○ Fair

○ Poor

Describe your rating:

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System is maintained adequately.
The Utility is working on creating mutual aid agreements with neighboring PWSs that have operators so that in case of emergent situations or in just general times of need, there will be assistance.

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

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Operator Certification and Education

1. Operator-In-Charge

1.1 Did you have a designated operator-in-charge during the report year?

- ☒ Yes (0 points)
- ☐ No (20 points)

Name:

WADE D PETERSON

Certification No:

27076

0

2. Certification Requirements

2.1 In accordance with Chapter NR 114.56 and 114.57, Wisconsin Administrative Code, what level and subclass(es) were required for the operator-in-charge (OIC) to operate the wastewater treatment plant and what level and subclass(es) were held by the operator-in-charge?

Sub Class	SubClass Description	WWTP	OIC		
		Basic	OIT	Basic	Advanced
A1	Suspended Growth Processes				X
A2	Attached Growth Processes				X
A3	Recirculating Media Filters				
A4	Ponds, Lagoons and Natural	X			X
A5	Anaerobic Treatment Of Liquid				
B	Solids Separation				X
C	Biological Solids/Sludges				X
P	Total Phosphorus				X
N	Total Nitrogen				
D	Disinfection				X
L	Laboratory				X
U	Unique Treatment Systems				
SS	Sanitary Sewage Collection	X	NA	X	NA

0

2.2 Was the operator-in-charge certified at the appropriate level and subclass(es) to operate this plant? (Note: Certification in subclass SS is required 5 years after permit reissuance.)

- ☒ Yes (0 points)
- ☐ No (20 points)

2.3 For wastewater treatment facilities with a registered or certified laboratory, is at least one operator that works in the laboratory certified at the basic level in the laboratory (L) subclass?

- ☐ Yes
- ☐ No

• N/A – Wastewater treatment facility does not have a registered or certified laboratory

2.4 For wastewater treatment facilities that own and operate a sanitary sewage collection system, has at least one operator been designated the OIC for sanitary sewage collection system and certified at the basic level in the sanitary sewage collection system (SS) subclass?

- ☒ Yes
- ☐ No
- ☐ N/A – Owner of the Wastewater treatment facility does not own and operate a sanitary sewage collection system

3. Succession Planning

3.1 In the event of the loss of your designated operator-in-charge, did you have a contingency plan to ensure the continued proper operation and maintenance of the plant that includes one or more of the following options (check all that apply)?

- ☐ One or more additional certified operators on staff

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<input checked="" type="checkbox"/> An arrangement with another certified operator <input checked="" type="checkbox"/> An arrangement with another community with a certified operator <input type="checkbox"/> An operator on staff who has an operator-in-training certificate for your plant and is expected to be certified within one year <input type="checkbox"/> A consultant to serve as your certified operator <input type="checkbox"/> None of the above (20 points) If "None of the above" is selected, please explain: <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	0
<p>4. Continuing Education Credits</p> <p>4.1 If you had a designated operator-in-charge, was the operator-in-charge earning Continuing Education Credits at the following rates?</p> <p>OIT and Basic Certification:</p> <ul style="list-style-type: none"> ● Averaging 6 or more CECs per year. ○ Averaging less than 6 CECs per year. <p>Advanced Certification:</p> <ul style="list-style-type: none"> ○ Averaging 8 or more CECs per year. ○ Averaging less than 8 CECs per year. 	

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

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Financial Management

1. Provider of Financial Information

Name:

Nicki Breunig, Clerk/Treasurer

Telephone:

(608) 522-4550

(XXX) XXX-XXXX

E-Mail Address
(optional):

clerk_treasurer@vonf.wi.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:

2023

0

● 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., CWP 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)

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

\$ 87,615.59

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

\$ 87,615.59

3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)

+

\$ 4,505.87

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

- \$ 0.00

3.2.6 Ending Balance as of December 31st for CMAR Reporting Year

\$ 92,121.46

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.

3.3 What amount should be in your Replacement Fund? \$ 92,121.46

0

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	Phosphorous rule project construction as required	\$250,000	2022
2	Sewer line rehab. Ongoing	\$30,000	2023
3	Sewer line rehab. Ongoing	\$30,000	2024
4	Sewer line rehab. Ongoing	\$30,000	2025
5	Sewer line rehab. Ongoing	\$30,000	2026
6	Possible Sewer Line Relocation - County Highway PF Bridge Reconstruction	\$50,000	2024

5. Financial Management General Comments

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: 2

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	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	6,011	354
February	6,510	574
March	4,390	467
April	4,540	381
May	4,288	212
June	3,712	92
July	2,928	9
August	2,964	4
September	3,167	12
October	3,203	5
November	2,964	23
December	3,134	109
Total	47,811	2,242
Average	3,984	187

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:

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?

7. Treatment Facility

7.1 Energy Usage

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

TREATMENT PLANT: Total Power Consumed/Month

	Electricity Consumed (kWh)	Total Influent Flow (MG)	Electricity Consumed/ Flow (kWh/MG)	Total Influent BOD (1000 lbs)	Electricity Consumed/ Total Influent BOD (kWh/1000lbs)	Natural Gas Consumed (therms)
January	6,011	2.04	2,947	5.18	1,160	354
February	6,510	1.59	4,094	3.53	1,844	574
March	4,390	2.10	2,090	2.79	1,573	467
April	4,540	5.12	887	7.05	644	381
May	4,288	1.96	2,188	4.00	1,072	212
June	3,712	1.33	2,791	3.21	1,156	92
July	2,928	1.20	2,440	0.00		9
August	2,964	1.17	2,533	1.67	1,775	4
September	3,167	1.09	2,906	2.40	1,320	12
October	3,203	1.46	2,194	3.60	890	5
November	2,964	0.94	3,153	2.40	1,235	23
December	3,134	1.14	2,749	2.29	1,369	109
Total	47,811	21.14		38.12		2,242
Average	3,984	1.76	2,581	3.47	1,276	187

7.1.2 Comments:

7.2 Energy Related Processes and Equipment

7.2.1 Indicate equipment and practices utilized at your treatment facility (Check all that apply):

- ☐ Aerobic Digestion
- ☐ Anaerobic Digestion
- ☐ Biological Phosphorus Removal
- ☐ Coarse Bubble Diffusers
- ☐ Dissolved O2 Monitoring and Aeration Control
- ☐ Effluent Pumping
- ☐ Fine Bubble Diffusers
- ☐ Influent Pumping
- ☐ Mechanical Sludge Processing
- ☐ Nitrification
- ☐ SCADA System
- ☐ UV Disinfection
- ☐ Variable Speed Drives
- ☒ Other:

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Lagoon system

7.2.2 Comments:

7.3 Future Energy Related Equipment

7.3.1 What energy efficient equipment or practices do you have planned for the future for your treatment facility?

8. Biogas Generation

8.1 Do you generate/produce biogas at your facility?

☒ No

☐ Yes

If Yes, how is the biogas used (Check all that apply):

☐ Flared Off

☐ Building Heat

☐ Process Heat

☐ Generate Electricity

☐ Other:

9. Energy Efficiency Study

9.1 Has an Energy Study been performed for your treatment facility?

☒ No

☐ Yes

☐ Entire facility

Year:

By Whom:

Describe and Comment:

☐ Part of the facility

Year:

By Whom:

Describe and Comment:

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

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2023

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:

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?

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

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

☐ A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation

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- ☐ 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:

☒ 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 Management 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	<input type="text" value="25"/>	% of system/year
Root removal	<input type="text" value="1"/>	% of system/year
Flow monitoring	<input type="text" value="0"/>	% of system/year
Smoke testing	<input type="text" value="0"/>	% of system/year
Sewer line televising	<input type="text" value="0"/>	% of system/year
Manhole inspections	<input type="text" value="25"/>	% of system/year
Lift station O&M	<input type="text" value="25"/>	# per L.S./year
Manhole rehabilitation	<input type="text" value="0"/>	% of manholes rehabbed
Mainline rehabilitation	<input type="text" value="0"/>	% of sewer lines rehabbed
Private sewer inspections	<input type="text" value="0"/>	% of system/year
Private sewer I/I removal	<input type="text" value="0"/>	% of private services

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River or water crossings % 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.

<input type="text" value="38.05"/>	Total actual amount of precipitation last year in inches
<input type="text" value="38"/>	Annual average precipitation (for your location)
<input type="text" value="9.9"/>	Miles of sanitary sewer
<input type="text" value="2"/>	Number of lift stations
<input type="text" value="0"/>	Number of lift station failures
<input type="text" value="0"/>	Number of sewer pipe failures
<input type="text" value="0"/>	Number of basement backup occurrences
<input type="text" value="0"/>	Number of complaints
<input type="text"/>	Average daily flow in MGD (if available)
<input type="text"/>	Peak monthly flow in MGD (if available)
<input type="text"/>	Peak hourly flow in MGD (if available)

3.2 Performance ratios for the past year:

<input type="text" value="0.00"/>	Lift station failures (failures/year)
<input type="text" value="0.00"/>	Sewer pipe failures (pipe failures/sewer mile/yr)
<input type="text" value="0.00"/>	Sanitary sewer overflows (number/sewer mile/yr)
<input type="text" value="0.00"/>	Basement backups (number/sewer mile)
<input type="text" value="0.00"/>	Complaints (number/sewer mile)
<input type="text"/>	Peaking factor ratio (Peak Monthly:Annual Daily Avg)
<input type="text"/>	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
None reported			

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

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:

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<div></div>
5.3 Explain any infiltration/inflow (I/I) changes this year from previous years:
<div>None.</div>
5.4 What is being done to address infiltration/inflow in your collection system?
<div>Sealing any manhole lids to prevent ground water from entering the system.</div>

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

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Grading Summary

WPDES No: 0028011

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	C	2	3	6
BOD/CBOD	C	2	10	20
TSS	B	3	5	15
Ammonia	A	4	5	20
Phosphorus	A	4	3	12
Ponds	C	2	7	14
Biosolids	A	4	5	20
Staffing/PM	A	4	1	4
OpCert	A	4	1	4
Financial	A	4	1	4
Collection	A	4	3	12
TOTALS			44	131
GRADE POINT AVERAGE (GPA) = 2.98				

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)

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Resolution or Owner's Statement

Name of Governing
Body or Owner:

Village of North Freedom

Date of Resolution or
Action Taken:

2024-06-10

Resolution Number:

2024-004

Date of Submittal:

ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO SPECIFIC CMAR SECTIONS (Optional for grade A or B. Required for grade C, D, or F):

Influent Flow and Loadings: Grade = C

Seasonal changes and the stormsewer system will be more routinely monitored. Looking into flow meters, flow meter electrical, and influent formula to confirm accuracy.

Effluent Quality: BOD: Grade = C

Seasonal changes will be more routinely monitored. The implementation of the WWTF should help address some of the elevated levels. If more problems arise, with the renewal of the discharge permit, variances may be brought up for discussion.

Effluent Quality: TSS: Grade = B

Effluent Quality: Ammonia: Grade = A

Effluent Quality: Phosphorus: Grade = A

Ponds: Grade = C

Will be looking into potential leakage problems.

Biosolids Quality and Management: Grade = A

Staffing: Grade = A

Operator Certification: Grade = A

Financial Management: Grade = A

Collection Systems: Grade = A

(Regardless of grade, response required for Collection Systems if SSOs were reported)

ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO THE OVERALL GRADE POINT AVERAGE AND ANY GENERAL COMMENTS

(Optional for G.P.A. greater than or equal to 3.00, required for G.P.A. less than 3.00)

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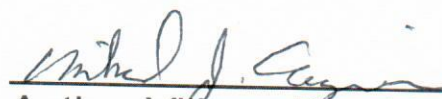
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G.P.A. = 2.98

The Village will continue to monitor and attempt for passing influent and effluent readings as this has been a continuous problem. The potential pond leakage is something new that we will be looking into. We are working on the WPDES renewal and will be possibly looking into a variance to help with treatment.

So passed on this 10th day of June, 2024 on a motion presented by
Trustee Doering and seconded by Trustee
M. Wiklund.



Acting Village President

Attest:



Nicki Breunig, Clerk/Treasurer