

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

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	0.0457	x	185	x	8.34	=	71
February	0.0411	x	335	x	8.34	=	115
March	0.0565	x	305	x	8.34	=	144
April	0.0505	x	165	x	8.34	=	69
May	0.0446	x	155	x	8.34	=	58
June	0.0488	x	160	x	8.34	=	65
July	0.0809	x	145	x	8.34	=	98
August	0.0439	x	155	x	8.34	=	57
September	0.0439	x	315	x	8.34	=	115
October	0.0433	x	260	x	8.34	=	94
November	0.0489	x	255	x	8.34	=	104
December	0.0403	x	235	x	8.34	=	79

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	0	0	0	0
February	1	0	0	0	0
March	1	0	0	1	1
April	1	0	0	0	0
May	1	0	0	0	0
June	1	0	0	0	0
July	1	1	1	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		1	1	1	1
Points		2	1	3	2
Total Number of Points					8

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:

5/5/2021

2020

3. Flow Meter

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

- Yes Enter last calibration date (MM/DD/YYYY)

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 |
| <input type="radio"/> Yes | <input type="radio"/> Yes | <input type="radio"/> Yes |
| <input checked="" type="radio"/> No | <input checked="" type="radio"/> No | <input checked="" type="radio"/> 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.?

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

<p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p> <p>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.</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
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Total Points Generated	8
Score (100 - Total Points Generated)	92
Section Grade	A

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

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	26	1	0	0
February	30	27	30	1	0	1
March	30	27	32	1	1	1
April	30	27	21	1	0	0
May	30	27	32	1	1	1
June	30	27	26	1	0	0
July	30	27	18	1	0	0
August	30	27	16	1	0	0
September	30	27	23	1	0	0
October	30	27	42	1	1	1
November	30	27	14	1	0	0
December	30	27	15	1	0	0

* Equals limit if limit is <= 10

Months of discharge/yr	12		
Points per each exceedance with 12 months of discharge		7	3
Exceedances		3	4
Points		21	12
Total number of points			33

33

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?

Continue to do general maintenance. Some of the results are due to seasonal change. Village is installing/constructing a Wastewater Treatment Facility that should help address these elevated levels. Village may consider pursuing CBOD variance in the future.

2. Flow Meter Calibration

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

● Yes Enter last calibration date (MM/DD/YYYY)
2020-10-05

○ 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

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?

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

Yes
 No
If Yes, please explain:

The Village is currently in the process of upgrading the pH and phosphorus removal chemical system and there were a couple of weeks in the Spring, due to the seasonal change, that increased the pH levels in North Freedom and the surrounding areas.

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	33
Score (100 - Total Points Generated)	67
Section Grade	D

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

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	28	1	0	0
February	60	54	32	1	0	0
March	60	54	36	1	0	0
April	60	54	28	1	0	0
May	60	54	35	1	0	0
June	60	54	39	1	0	0
July	60	54	50	1	0	0
August	60	54	40	1	0	0
September	60	54	44	1	0	0
October	60	54	46	1	0	0
November	60	54	15	1	0	0
December	60	54	11	1	0	0

* Equals limit if limit is <= 10

Months of Discharge/yr	12		
Points per each exceedance with 12 months of discharge:	7	3	
Exceedances	0	0	
Points	0	0	
Total Number of Points		0	

0

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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

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 Exceedance	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 Exceedance
January	108		13.5	0					
February	108		20	0					
March	108		19.25	0					
April	108		10.25	0					
May	108		1.8225	0					
June	108		6.275	0					
July	108		7.725	0					
August	108		9.25	0					
September	108		7.3	0					
October	108		5.9	0					
November	108		5.875	0					
December	108		7.8	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

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?

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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:

5/5/2021

2020

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	3.650	1	0
February	4.5	3.825	1	0
March	4.5	3.675	1	0
April	4.5	2.625	1	0
May	4.5	2.150	1	0
June	4.5	3.050	1	0
July	4.5	3.025	1	0
August	4.5	3.375	1	0
September	4.5	2.675	1	0
October	4.5	2.425	1	0
November	4.5	2.725	1	0
December	4.5	2.800	1	0
Months of Discharge/yr			12	
Points per each exceedance with 12 months of discharge:				10
Exceedances				0
Total Number of Points				0

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?

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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

Ponds And Lagoon Leakage

1. Pond Lining

1.1 What material was used to line your ponds?

Bentonite, Clay in primary, PVC in secondary pond

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 time x 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, Ultrasonic

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
1.417	JANUARY	1.385
1.1929	FEBRUARY	.965
1.7523	MARCH	1.832
1.5139	APRIL	1.029
1.3822	MAY	1.259
1.463	JUNE	.421
2.5089	JULY	3.165
1.36	AUGUST	.647
1.3174	SEPTEMBER	1.259
1.3431	OCTOBER	1.539
1.4676	NOVEMBER	1.456
1.2478	DECEMBER	.892
17.9661	YEARLY TOTAL	15.8490

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.

$$\frac{\text{Total effluent, MG} \Rightarrow 15.8490}{\text{Total influent, MG} \Rightarrow 17.9661} = 0.882 \quad \leq \text{effl / infl ratio}$$

Conversion to a percent of volume loss:
 $(1 - \text{effl/infl ratio}) * 100 = 11.8 \quad \text{\% of influent lost and not discharged with effluent}$

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:

5/5/2021

2020

4. Surface Area

4.1 What was the total wastewater surface area of the ponds/lagoons at operating level (do not include seepage cells)?

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.

Total Annual Influent (MG)	17.9661	
Total Annual Effluent (MG)	15.8490	
Estimated Net Loss (MG)	2.1171	
Estimated Leakage Amount (gpd)		5800

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 ->

o Storage Decrease: Enter amount in MG ->

5.2 CMAR Estimated Leakage Rate in gallons per acre per day (gpad): The CMAR Estimated Leakage Rate in gpad is the leakage amount in gpd (from part 5.1) divided by the total pond surface area (from question 4).

Leakage Amount (gpd)		Acres		CMAR Estimated Leakage Rate
5800	divided by	9	=	644

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

● No

If yes, what was the field Test Calculated Leakage Rate for your ponds/lagoons?

gpad

NOTE: if 6.1 is answered Yes, the value entered above in gpad will be used in 7.1 to compute points generated.

6.2 Leakage Rate Comments:

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

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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

Based on the leakage rate in gpad, the points earned are: 0

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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

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:

Lagoon System - Did not remove any biosolids

2. Land Application Site

2.1 Last Year's Approved and Active Land Application Sites

2.1.1 How many acres did you have?

560.50 acres

2.1.2 How many acres did you use?

acres

2.2 If you did not have enough acres for your land application needs, what action was taken?

2.3 Did you overapply nitrogen on any of your approved land application sites you used last year?

Yes (30 points)

No

2.4 Have all the sites you used last year for land application been soil tested in the previous 4 years?

Yes

No (10 points)

N/A

3. Biosolids Metals

Number of biosolids outfalls in your WPDES permit:

3.1 For each outfall tested, verify the biosolids metal quality values for your facility during the last calendar year.

Outfall No. 002 - LAGOON SLUDGE

Parameter	80% of Limit	H.Q. Limit	Ceiling Limit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	80% Value	High Quality	Ceiling
Arsenic													<13				0	0
Cadmium																	0	0
Copper																	0	0
Lead																	0	0
Mercury																	0	0
Molybdenum																0		0
Nickel																0		0
Selenium																0		0
Zinc																	0	0

3.1.1 Number of times any of the metals exceeded the high quality limits OR 80% of the limit for molybdenum, nickel, or selenium = 0

Exceedence Points

0 (0 Points)

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

<p> <input type="radio"/> 1-2 (10 Points) <input type="radio"/> > 2 (15 Points) 3.1.2 If you exceeded the high quality limits, did you cumulatively track the metals loading at each land application site? (check applicable box) <input type="radio"/> Yes <input type="radio"/> No (10 points) <input checked="" type="radio"/> N/A - Did not exceed limits or no HQ limit applies (0 points) <input type="radio"/> N/A - Did not land apply biosolids until limit was met (0 points) 3.1.3 Number of times any of the metals exceeded the ceiling limits = 0 Exceedence Points <input checked="" type="radio"/> 0 (0 Points) <input type="radio"/> 1 (10 Points) <input type="radio"/> > 1 (15 Points) 3.1.4 Were biosolids land applied which exceeded the ceiling limit? <input type="radio"/> Yes (20 Points) <input checked="" type="radio"/> No (0 Points) 3.1.5 If any metal limit (high quality or ceiling) was exceeded at any time, what action was taken? Has the source of the metals been identified? <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> </p>	0																				
<p>4. Pathogen Control (per outfall):</p> <p>4.1 Verify the following information. If any information is incorrect, use the Report Issue button under the Options header in the left-side menu.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tr><td style="width: 40%;">Outfall Number:</td><td></td></tr> <tr><td>Biosolids Class:</td><td></td></tr> <tr><td>Bacteria Type and Limit:</td><td></td></tr> <tr><td>Sample Dates:</td><td style="text-align: center;">-</td></tr> <tr><td>Density:</td><td></td></tr> <tr><td>Sample Concentration Amount:</td><td></td></tr> <tr><td>Requirement Met:</td><td style="text-align: center;">No</td></tr> <tr><td>Land Applied:</td><td style="text-align: center;">No</td></tr> <tr><td>Process:</td><td></td></tr> <tr><td>Process Description:</td><td></td></tr> </table> <p>4.2 If exceeded Class B limit or did not meet the process criteria at the time of land application.</p> <p>4.2.1 Was the limit exceeded or the process criteria not met at the time of land application?</p> <p> <input type="radio"/> Yes (40 Points) <input checked="" type="radio"/> No If yes, what action was taken? <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> </p>	Outfall Number:		Biosolids Class:		Bacteria Type and Limit:		Sample Dates:	-	Density:		Sample Concentration Amount:		Requirement Met:	No	Land Applied:	No	Process:		Process Description:		0
Outfall Number:																					
Biosolids Class:																					
Bacteria Type and Limit:																					
Sample Dates:	-																				
Density:																					
Sample Concentration Amount:																					
Requirement Met:	No																				
Land Applied:	No																				
Process:																					
Process Description:																					
<p>5. Vector Attraction Reduction (per outfall):</p> <p>5.1 Verify the following information. If any of the information is incorrect, use the Report Issue button under the Options header in the left-side menu.</p>																					

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

Outfall Number:		0
Method Date:		
Option Used To Satisfy Requirement:		
Requirement Met:	No	
Land Applied:	No	
Limit (if applicable):		
Results (if applicable):		
<p>5.2 Was the limit exceeded or the process criteria not met at the time of land application?</p> <p><input type="radio"/> Yes (40 Points)</p> <p><input checked="" type="radio"/> No</p> <p>If yes, what action was taken?</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		
<p>6. Biosolids Storage</p> <p>6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site?</p> <p><input checked="" type="radio"/> >= 180 days (0 Points)</p> <p><input type="radio"/> 150 - 179 days (10 Points)</p> <p><input type="radio"/> 120 - 149 days (20 Points)</p> <p><input type="radio"/> 90 - 119 days (30 Points)</p> <p><input type="radio"/> < 90 days (40 Points)</p> <p><input type="radio"/> N/A (0 Points)</p> <p>6.2 If you checked N/A above, explain why.</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		
<p>7. Issues</p> <p>7.1 Describe any outstanding biosolids issues with treatment, use or overall management:</p> <div style="border: 1px solid black; padding: 5px;">None</div>		

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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:

5/5/2021

2020

Staffing and Preventative Maintenance (All Treatment Plants)

<p>1. Plant Staffing</p> <p>1.1 Was your wastewater treatment plant adequately staffed last year?</p> <ul style="list-style-type: none">● Yes○ No <p>If No, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Could use more help/staff for:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>1.2 Did your wastewater staff have adequate time to properly operate and maintain the plant and fulfill all wastewater management tasks including recordkeeping?</p> <ul style="list-style-type: none">● Yes○ No <p>If No, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
<p>2. Preventative Maintenance</p> <p>2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items?</p> <ul style="list-style-type: none">● Yes (Continue with question 2) <input type="checkbox"/><input type="checkbox"/>○ No (40 points) <input type="checkbox"/><input type="checkbox"/> <p>If No, please explain, then go to question 3:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment?</p> <ul style="list-style-type: none">● Yes○ No (10 points) <p>2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly?</p> <ul style="list-style-type: none">● Yes<ul style="list-style-type: none">○ Paper file system○ Computer system● Both paper and computer system○ No (10 points)	0
<p>3. O&M Manual</p> <p>3.1 Does your plant have a detailed O&M and Manufacturer Equipment Manuals that can be used as a reference when needed?</p> <ul style="list-style-type: none">● Yes○ No	
<p>4. Overall Maintenance /Repairs</p> <p>4.1 Rate the overall maintenance of your wastewater plant.</p> <ul style="list-style-type: none">○ Excellent● Very good○ Good○ Fair○ Poor <p>Describe your rating:</p> <div style="border: 1px solid black; padding: 2px;">The system in maintained adequately</div>	

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

Total Points Generated	0
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Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

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:

John Anstett

Certification No:

38630

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	X	NA	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 and is basic level only.)

- Yes (0 points)
- No (20 points)

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
- An arrangement with another certified operator
- An arrangement with another community with a certified operator
- An operator on staff who has an operator-in-training certificate for your plant and is expected to be certified within one year
- A consultant to serve as your certified operator
- None of the above (20 points)

If "None of the above" is selected, please explain:

0

4. Continuing Education Credits

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

4.1 If you had a designated operator-in-charge, was the operator-in-charge earning Continuing Education Credits at the following rates? OIT and Basic Certification: <input checked="" type="radio"/> Averaging 6 or more CECs per year. <input type="radio"/> Averaging less than 6 CECs per year. Advanced Certification: <input type="radio"/> Averaging 8 or more CECs per year. <input type="radio"/> Averaging less than 8 CECs per year.	
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Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

Financial Management

<p>1. Provider of Financial Information</p> <p>Name: <input style="width: 150px;" type="text" value="Nicki Breunig"/></p> <p>Telephone: <input style="width: 150px;" type="text" value="(608) 522-4550"/> (XXX) XXX-XXXX</p> <p>E-Mail Address (optional): <input style="width: 300px;" type="text" value="villageofnorthfreedom@gmail.com"/></p>											
<p>2. Treatment Works Operating Revenues</p> <p>2.1 Are User Charges or other revenues sufficient to cover O&M expenses for your wastewater treatment plant AND/OR collection system ?</p> <p>● Yes (0 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ No (40 points)</p> <p>If No, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised? Year: <input style="width: 80px;" type="text" value="2020"/></p> <p>● 0-2 years ago (0 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ 3 or more years ago (20 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ N/A (private facility)</p> <p>2.3 Did you have a special account (e.g., CWF required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system?</p> <p>● Yes (0 points)</p> <p>○ No (40 points)</p>	0										
<p>REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]</p>											
<p>3. Equipment Replacement Funds</p> <p>3.1 When was the Equipment Replacement Fund last reviewed and/or revised? Year: <input style="width: 80px;" type="text" value="2020"/></p> <p>● 1-2 years ago (0 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ 3 or more years ago (20 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ N/A</p> <p>If N/A, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>											
<p>3.2 Equipment Replacement Fund Activity</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">3.2.1 Ending Balance Reported on Last Year's CMAR</td> <td style="text-align: right; padding: 2px;">\$ <input style="width: 100px;" type="text" value="86,104.22"/></td> </tr> <tr> <td style="padding: 2px;">3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)</td> <td style="text-align: right; padding: 2px;">\$ <input style="width: 100px;" type="text" value="0.00"/></td> </tr> <tr> <td style="padding: 2px;">3.2.3 Adjusted January 1st Beginning Balance</td> <td style="text-align: right; padding: 2px;">\$ <input style="width: 100px;" type="text" value="86,104.22"/></td> </tr> <tr> <td style="padding: 2px;">3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)</td> <td style="text-align: right; padding: 2px;">\$ <input style="width: 100px;" type="text" value="126.68"/></td> </tr> <tr> <td style="text-align: right; padding: 2px;">+</td> <td style="text-align: right; padding: 2px;">\$ <input style="width: 100px;" type="text" value="126.68"/></td> </tr> </table>	3.2.1 Ending Balance Reported on Last Year's CMAR	\$ <input style="width: 100px;" type="text" value="86,104.22"/>	3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)	\$ <input style="width: 100px;" type="text" value="0.00"/>	3.2.3 Adjusted January 1st Beginning Balance	\$ <input style="width: 100px;" type="text" value="86,104.22"/>	3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	\$ <input style="width: 100px;" type="text" value="126.68"/>	+	\$ <input style="width: 100px;" type="text" value="126.68"/>	
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3.2.3 Adjusted January 1st Beginning Balance	\$ <input style="width: 100px;" type="text" value="86,104.22"/>										
3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	\$ <input style="width: 100px;" type="text" value="126.68"/>										
+	\$ <input style="width: 100px;" type="text" value="126.68"/>										

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

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

- \$ 32,451.40

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

\$ 53,779.50

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.

Village currently in process of upgrading their wastewater treatment facility - for their phosphorus levels to be compliant with DNR permit. Working with MSA and the DNR for the Clean Water Fund.

0

3.3 What amount should be in your Replacement Fund? \$ 53,779.50

Please note: If you had a CWF 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	Sewer line rehab. Ongoing	30000	2021
2	Phosphorous rule project construction as required	250000	2021

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:

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	3,774	392
February	3,972	406
March	4,374	541
April	4,102	320
May	4,191	208
June	3,402	54
July	3,390	11
August	3,531	11
September	3,648	5
October	3,156	2
November	2,974	17
December	4,165	147
Total	44,679	2,114
Average	3,723	176

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:

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:

5/5/2021

2020

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	3,774	1.42	2,658	2.20	1,715	392
February	3,972	1.19	3,338	3.34	1,189	406
March	4,374	1.75	2,499	4.46	981	541
April	4,102	1.52	2,699	2.07	1,982	320
May	4,191	1.38	3,037	1.80	2,328	208
June	3,402	1.46	2,330	1.95	1,745	54
July	3,390	2.51	1,351	3.04	1,115	11
August	3,531	1.36	2,596	1.77	1,995	11
September	3,648	1.32	2,764	3.45	1,057	5
October	3,156	1.34	2,355	2.91	1,085	2
November	2,974	1.47	2,023	3.12	953	17
December	4,165	1.25	3,332	2.45	1,700	147
Total	44,679	17.97		32.56		2,114
Average	3,723	1.50	2,582	2.71	1,487	176

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:

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

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:

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:

5/5/2021

2020

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:

Cleaned 5000 feet of sewer

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?

p.o.t.w. collection system codes

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 2017-10-29

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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:

5/5/2021

2020

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="25"/>	% 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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

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="41.57"/>	Total actual amount of precipitation last year in inches
<input type="text" value="39.1"/>	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:

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

<input type="text"/>
5.3 Explain any infiltration/inflow (I/I) changes this year from previous years: <input type="text" value="None"/>
5.4 What is being done to address infiltration/inflow in your collection system? <input type="text" value="Sealing manhole lids - to prevent ground water from entering system"/>

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

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 2020

Grading Summary

WPDES No: 0028011

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	A	4	3	12
BOD/CBOD	D	1	10	10
TSS	A	4	5	20
Ammonia	A	4	5	20
Phosphorus	A	4	3	12
Ponds	A	4	7	28
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	146
GRADE POINT AVERAGE (GPA) = 3.32				

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)

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:

5/5/2021

2020

Resolution or Owner's Statement

Name of Governing
Body or Owner:

Village of North Freedom

Date of Resolution or
Action Taken:

2021-05-10

Resolution Number:

2021-005

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 = A

Effluent Quality: BOD: Grade = D

Seasonal changes will be more monitored at lagoon location. As explained on the previous sections, Village could possibly be looking into CBOD variances and with the new Wastewater Treatment Facility that should address some of the elevated levels.

Effluent Quality: TSS: Grade = A

Effluent Quality: Ammonia: Grade = A

Effluent Quality: Phosphorus: Grade = A

Ponds: Grade = A

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)

G.P.A. = 3.32

Compliance Maintenance Annual Report

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:
5/5/2021 **2020**

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So passed on this 10th day of May 2021 on a motion presented by Trustee B. Schwarz and seconded by Trustee T. Fuller.


President Andrew Dear

Attest

Nicki Breunig, Clerk/Treasurer