#### **North Freedom Wastewater Treatment Facility**

Last Updated: Reporting For:

2021

0

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#### **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	×	8.34	=	Influent Monthly Average BOD Loading, lbs/day
January	0.0430	X	200	Х	8.34	=	72
February	0.0427	х	190	X	8.34	=	68
March	0.0442	X	200	X	8.34	=	74
April	0.0444	Х	180	Х	8.34	=	67
May	0.0406	Х	340	X	8.34	=	115
June	0.0366	X	235	X	8.34	=	72
July	0.0399	Х	315	Х	8.34	=	105
August	0.0428	Х	240	X	8.34	=	86
September	0.0370	Х	200	X	8.34	=	62
October	0.0346	х	215	X	8.34	=	62
November	0.0338	Х	270	X	8.34	=	76
December	0.0349	х	320	X	8.34	=	93

- 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	Х	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:

Points per e Exceedance		2	1 0	3	2
December	1	0	0	0	0
November	1	0	0	0	0
October	1	0	0	0	0
September	1	0	0	0	0
August	1	0	0	0	0
July	1	0	0	0	0
June	1	0	0	0	0
May	1	0	0	0	0
April	1	0	0	0	0
March	1	0	0	0	0
February	1	0	0	0	0
January	1	0	0	0	0
	Influent		than 100% of	than 90% of design	than 100% of design
	of		Number of times flow was greater	Number of times BOD was greater	Number of times BOD was greater

North Freedom Wastewater Treatment Facility Last Updated: Reporting For: 6/17/2022 2021 3. Flow Meter 3.1 Was the influent flow meter calibrated in the last year? Enter last calibration date (MM/DD/YYYY) 2021-10-11 O 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 O No If No, please explain: 4.2 Was it necessary to enforce the ordinance? o 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 o Yes o Yes o Yes No No No 5.2 Did you receive septage at your facility? If yes, indicate volume in gallons. Septic Tanks o Yes gallons ● No Holding Tanks o Yes gallons · No Grease Traps o 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? o 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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o 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	0
Score (100 - Total Points Generated)	100
Section Grade	A

North Freedom Wastewater Treatment Facility

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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

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	21	1	0	0
February	30	27	30	1	0	1
March	30	27	46	1	1	1
April	30	27	22	1	0	0
May	30	27	31	1	1	1
June	30	27	28	1	0	1
July	30	27	22	1	0	0
August	30	27	20	1	0	0
September	30	27	23	1	0	0
October	30	27	31	1	1	1
November	30	27	25	1	0	0
December	30	27	13	1	0	0
		* Eq	uals limit if limit is	<= 10		
Months of di	ischarge/yr			12		
Points per e	ach exceedanc	e with 12 mor	ths of discharge		7	3
Exceedance:	S				3	5
Points					21	15
Total numb	per of points					36

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?

These violations occurred before I was operator. I was not able to find any notes on these violations.

- 2. Flow Meter Calibration
- 2.1 Was the effluent flow meter calibrated in the last year?
- Yes

Enter last calibration date (MM/DD/YYYY)

2021-10-11

O No

If No, please explain:

- 3. Treatment Problems
- 3.1 What problems, if any, were experienced over the last year that threatened treatment?

Annual pond rollover in the spring that causes issues with high pH and ammonia levels.

- 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? o Yes

36

#### North Freedom Wastewater Treatment Facility

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• No	
If Yes, please explain:	
4.2 At any time in the past year was there a failure of an effluer toxicity (WET) test?	nt acute or chronic whole effluent
o Yes	
• No	
If Yes, please explain:	
L	ken to identify and/or reduce
source(s) of toxicity?	Separation (Market Separation) Separation (Market Separation) (Market Separation)
o Yes	
o No	
• N/A	
Please explain unless not applicable:	

Total Points Generated	36
Score (100 - Total Points Generated)	64
Section Grade	D

North Freedom Wastewater Treatment Facility

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2021

0

#### **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:

	per of Points					0
Points					0	0
Exceedance	S				0	0
		ance with 12	months of disch	arge:	7	3
	ischarge/yr			12		
		* Eq	uals limit if limit is	<= 10		
December	60	54	24	1	0	0
November	60	54	26	1	0	0
October	60	54	36	1	0	0
September	60	54	33	1	0	0
August	60	54	30	1	0	0
July	60	54	48	1	0	0
June	60	54	46	1	0	0
May	60	54	29	1	0	0
April	60	54	38	1	0	0
March	60	54	23	1	0	0
February	60	54	24	1	0	0
January	60	54	23	1	0	0
001	Average Limit (mg/L)	Permit Limit >10 (mg/L)	Average (mg/L)	Discharge with a Limit	Exceedance	Limit Exceedance
Outfall No.	Monthly	90% of	Effluent Monthly	Months of	Permit Limit	90% Permit

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?

None

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

#### North Freedom Wastewater Treatment Facility

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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

Outfall No.	Monthly	Weekly	Effluent	Monthly	Effluent	Effluent	Effluent	Effluent	Weekly
001	Average	Average	Monthly	Permit	Weekly	Weekly	Weekly	Weekly	Permit
	NH3	NH3	Average	Limit	Average	Average	Average	Average	Limit
	Limit	Limit	NH3	Exceed	for Week	for Week	for Week	for Week	Exceed
	(mg/L)	(mg/L)	(mg/L)	ance	1	2	3	4	ance
January	108		8.75	0					
February	108		17	0					
March	108		19.25	0					
April	108		7.6	0					
May	108		1.465	0					
June	108		3.275	0					
July	108		6.6	0					
August	108		10.3	0					
September	108		10.725	0					
October	108		8.8	0					
November	108		6.475	0					
December	108		6.175	0					
Points per e	ach excee	dance of N	onthly av	erage:					10
Exceedances	s, Monthly	:							0
Points:									0
Points per e	ach excee	dance of v	veekly ave	erage (whe	en there is	no month	ly averag	e):	2.5
xceedance	s, Weekly:	T B S I							0
Points:									0
Total Numl	per of Po	ints							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?

None

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

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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	Effluent Monthly	Months of	Permit Limit
	phosphorus Limit (mg/L)	Average phosphorus (mg/L)	Discharge with a Limit	Exceedance
January	4.5	3.500	1	0
February	4.5	4.025	1	0
March	4.5	4.150	1	0
April	4.5	2.800	1	0
May	4.5	2.450	1	0
June	4.5	2.600	1	0
July	4.5	3.325	1	0
August	4.5	3.650	1	0
September	4.5	3.950	1	0
October	4.5	3.775	1	0
November	4.5	3.400	1	0
December	4.5	3.725	1	0
Months of Dischar	ge/yr		12	
Points per each	ge:	10		
Exceedances	0			
Total Number of	f 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?

None

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

0

#### **North Freedom Wastewater Treatment Facility**

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0

2021

#### Ponds And Lagoon Leakage

1.	Dand	Lining
Contract of the Contract of th		1 11 11 11 16 1

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) □□

o No (40 points) (Go to guestion 6)□□

No Discharge (0 points)

2.2.1 Method of effluent flow measurement:

Parshall flume w/ Ultrasonic level

#### 3. Total Flow Volumes

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

14.4266	YEARLY TOTAL	8.2730
1.082	DECEMBER	.645
1.0131	NOVEMBER	.292
1.0725	OCTOBER	.257
1.1093	SEPTEMBER	.446
1.3254	AUGUST	.715
1.2372	JULY	.521
1.0969	JUNE	.217
1.2586	MAY	.72
1.331	APRIL	.817
1.371	MARCH	1.306
1.1968	FEBRUARY	1.159
1.3328	JANUARY	1.178
Total Monthly Influent Volume		Total Monthly Effluent Volume

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 =>

8.2730

0.573

<= effl / infl ratio

Total influent, MG =>

14,4266

Conversion to a percent of volume loss:

(1-effl/infl ratio) \* 100 =

42.7

North Freedom Waste	ewater Ir	eatment	Facility						Updated: 7/2022	Reporting 2021	
=				%	of influ	ent lo	st and	not dis	charged w	ith effluent	
4. Surface Area 4.1 What was the tot include seepage cells)	? Acres	ater surfa	ce area o	ftŀ	ne ponds	s/lago	ons at	: operati	ng level (c	lo not	
5. Leakage Rate Estim 5.1 Total influent volu pond/lagoon storage ( the estimated leakage	ime (in Mo in MG) is	the net wa	total efflu astewate	ien r lo	t volume ss. The	e (in M	1G) pl ss div	us or m ided by	inus the ch 0.000365	nange in equals	
Total Annual	Influent (M	1G)	14.	42	66				1		
Total Annual	Effluent (M	IG)	8.2	273	30						
Estimated Ne	et Loss (M	G)	6.3	153	36						
Estimated Leakage	ge Amount	(gpd)					1685	9	1		
If you have a *Depar the storage change la o Storage Increase: I o Storage Decrease:	est year in Enter amo	MG belov unt in MG	v. ->	- de	eterminii	ng a c			age volum	e, enter	
5.2 CMAR Estimated L Leakage Rate in gpad surface area (from que Leakage Amount	eakage Ra	te in gallo age amou	ons per a	cre	per day from par	t 5.1)	divide	e CMAR ed by th	Estimated e total por	i nd	
(gpd)		ACI	62			age Ra					
16859	divided by	g	)	=		.873					
6. On Site Leakage Tes 6.1 Did you conduct a was approved by the I o Yes	nd on-site	field wat t and is s	er baland till valid?	:e/I	leakage 1	test o	n your	ponds	or lagoons	that	
• No											
If yes, what was the	field Test ( gpad	Calculated	Leakage	Ra	ate for y	our po	onds/la	agoons?			
NOTE: if 6.1 is answ points generated. 6.2 Leakage Rate Com		the value	entered	abo	ove in gp	ad wi	ll be u	ised in 7	7.1 to com	pute	
7 5-11-11-1				_							
7. Estimated Leakage R 7.1 The CMAR Estimat table below. If an approved field to Department, the Field from the table below	ed Leakag est was co	e Rate (fr	and the re	esu	Its are s	till val	lid and	accept	ed by the		

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

Total Points Generated	10
Score (100 - Total Points Generated)	90
Section Grade	В

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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	
Did flot felliove 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)  6.2 If you checked N/A above, explain why.	0
7. Issues 7.1 Describe any outstanding biosolids issues with treatment, use or overall management:  None	

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

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#### **Staffing and Preventative Maintenance (All Treatment Plants)**

1.1 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:	
<ul> <li>2. Preventative Maintenance</li> <li>2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items?</li> <li>Yes (Continue with question 2) □□</li> <li>No (40 points)□□</li> <li>If No, please explain, then go to question 3:</li> <li>2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment?</li> <li>Yes</li> <li>No (10 points)</li> </ul>	o
<ul> <li>2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly?</li> <li>Yes</li> <li>Paper file system</li> <li>Computer system</li> <li>Both paper and computer system</li> <li>No (10 points)</li> </ul>	
<ul> <li>3. O&amp;M Manual</li> <li>3.1 Does your plant have a detailed O&amp;M and Manufacturer Equipment Manuals that can be used as a reference when needed?</li> <li>Yes</li> <li>No</li> </ul>	
<ul> <li>4. Overall Maintenance /Repairs</li> <li>4.1 Rate the overall maintenance of your wastewater plant.</li> <li>Excellent</li> <li>Very good</li> <li>Good</li> <li>Fair</li> <li>Poor</li> <li>Describe your rating:</li> <li>System is maintained adequately</li> </ul>	

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

North Freedom Wastewater Treatment Facility

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Operator	Certification and Educa	tion				
1.1 Did yo ● Yes (0 ○ No (20	A STATE OF THE STA	n-charge during th	e report year?			
Name:	ADE D PETERSON					0
Certificat						
Certificat	27076					
2 Cortifica	ation Requirements					+
2.1 In account and subcle	cordance with Chapter NR 114.50 ass(es) were required for the open plant and what level and subcla	erator-in-charge (	OIC) to operat	e the waste	water	
Sub	SubClass Description	WWTP		OIC		
Class		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					
В	Solids Separation				X	0
С	Biological Solids/Sludges				X	
Р	Total Phosphorus				X	
N	Total Nitrogen					
D	Disinfection				X	
L	Laboratory				X	
U	Unique Treatment Systems					
SS	Sanitary Sewage Collection	X	NA	X	NA	
2.2 Was to plant? (No • Yes (0 • No (20		t the appropriate I is required 5 years	evel and subc after permit r	lass(es) to o	perate this	
3.1 In the to ensure of the following one or the following of the followin	ion Planning event of the loss of your design the continued proper operation owing options (check all that app more additional certified operat angement with another certified angement with another commun rator on staff who has an operat ified within one year sultant to serve as your certified of the above (20 points) of the above" is selected, please	and maintenance only)? tors on staff operator hity with a certified cor-in-training certi	of the plant the	at includes d	one or more	0
4.1 If you	ng Education Credits had a designated operator-in-ch Credits at the following rates?	narge, was the ope	rator-in-charg	e earning C	ontinuing	

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OIT and Basic Certification:

- Averaging 6 or more CECs per year.
- o Averaging less than 6 CECs per year.

Advanced Certification:

- Averaging 8 or more CECs per year.
- o Averaging less than 8 CECs per year.

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

earned interest, etc.)

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	6/17/2022	2021
Financial Management		
1. Provider of Financial Information		
Name:		
Nicki Breung		
Telephone: 608-522-4550	(XXX) XXX-XXXX	
E-Mail Address	Constitution of the Consti	
(optional):		
villageofnorthfreedom@gmail.com		
2 Treatment Works Operating Revenues		
<ul><li>2. Treatment Works Operating Revenues</li><li>2.1 Are User Charges or other revenues sufficient to cover O&amp;M</li></ul>	expenses for your wastewate	er
treatment plant AND/OR collection system?	expenses for your musicinate	"
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 revis	sed?
Year:		
2021		0
• 0-2 years ago (0 points)		
<ul><li>○ 3 or more years ago (20 points)□□</li><li>○ N/A (private facility)</li></ul>		
2.3 Did you have a special account (e.g., CWFP required segregations)	ated Depleasement Fried ate.)	
financial resources available for repairing or replacing equipment	for your wastewater treatme	ent
plant and/or collection system?	, car madernata a cating	
<ul><li>Yes (0 points)</li></ul>		
O No (40 points)		
REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL C	OMPLETE QUESTION 3]	
<ul><li>3. Equipment Replacement Funds</li><li>3.1 When was the Equipment Replacement Fund last reviewed a</li></ul>	nd/or revised?	
Year:	nd/or revised?	
2021		
<ul><li>1-2 years ago (0 points)□□</li></ul>		
○ 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	\$ 53,779.50	
3.2.2 Adjustments - if necessary (e.g. earned interest,	\$ 0.00	
audit correction, withdrawal of excess funds, increase		
making up previous shortfall, etc.)	t 52.770.50	
3.2.3 Adjusted January 1st Beginning Balance	\$ 53,779.50	
3.2.4 Additions to Fund (e.g. portion of User Fee,		

32,490.67

Number of Municipally Owned Pump/Lift Stations:

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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	\$ 86,270	.17
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 re	pairs from 3.2.5	above.
Reimbursement from CWF disbursement #1 for 2020 transfers		
3.3 What amount should be in your Replacement Fund?  Please note: If you had a CWFP loan, this amount was originally bas Assistance Agreement (FAA) and should be regularly updated as nee instructions and an example can be found by clicking the SectionInst header in the left-side menu.  3.3.1 Is the December 31 Ending Balance in your Replacement Fund 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 or new construction of your treatment facility or collection system?  Yes - If Yes, please provide major project information, if not alread on No	for upgrading, re	ulation er Info equal to, or  chabilitating,
Project Project Description #	Estimated Cost	Approximate Construction Year
1 Phosphorous rule project construction as required	250000	2022
2 Sewer line rehab. Ongoing	30000	2023
3 Sewer line rehab. Ongoing	30000	
4 Sewer line rehab. Ongoing	30000	
5 Sewer line rehab. Ongoing	30000	2026
5. Financial Management General Comments		
At this time funds are available to continue maintenance projects.		
ENERGY EFFICIENCY AND USE		
Collection System     6.1 Energy Usage     6.1.1 Enter the monthly energy usage from the different energy sour	ces:	
COLLECTION SYSTEM DUMPAGE, Total Dower Consumed		

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	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	3,938	295
February	4,346	459
March	5,159	697
April	4,229	364
May	3,418	145
June	2,962	74
July	2,604	8
August	3,105	5
September	2,819	3
October	2,771	13
November	2,861	8
December	3,132	87
Total	41,344	2,158
Average	3,445	180

6.1.2 Comments:
5.2 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
☐ Submarsible Rumps
Submersible Pumps
☐ Variable Speed Drives ☐ Other:
Other:
6.2.2 Comments:
5.3 Has an Energy Study been performed for your pump/lift stations?
• No
o Yes
Year:
By Whom:
Describe and Comment:

#### North Freedom Wastewater Treatment Facility

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6.4 Future Energy Related Equipme	6.4	<b>Future</b>	Energy	Related	Equipmen	t
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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	3,938	1.33	2,961	2.23	1,766	295
February	4,346	1.20	3,622	1.90	2,287	459
March	5,159	1.37	3,766	2.29	2,253	697
April	4,339	1.33	3,262	2.01	2,159	364
May	3,418	1.26	2,713	3.57	957	145
June	2,962	1.10	2,693	2.16	1,371	74
July	2,604	1.24	2,100	3.26	799	8
August	3,105	1.33	2,335	2.67	1,163	5
September	2,819	1.11	2,540	1.86	1,516	3
October	2,771	1.07	2,590	1.92	1,443	13
November	2,861	1.01	2,833	2.28	1,255	8
December	3,132	1.08	2,900	2.88	1,088	87
Total	41,454	14.43		29.03		2,158
Average	3,455	1.20	2,860	2.42	1,505	180

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	

Other:

☐ SCADA System ☐ UV Disinfection

☐ Variable Speed Drives

#### **North Freedom Wastewater Treatment Facility**

6/17/2022 2021 Lagoon system 7.2.2 Comments: None - Lagoon system 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? None 8. Biogas Generation 8.1 Do you generate/produce biogas at your facility? No o 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 o Yes ☐ Entire facility Year: By Whom: Describe and Comment: ☐ Part of the facility Year: By Whom: Describe and Comment:

Last Updated: Reporting For:

North Freedom Wastewater Treatment Facility	Last Updated: 6/17/2022	Reporting For 2021
Total Points Concepted		

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

North Freedom Wastewater Treatment Facility

Last Updated: Reporting For:

6/17/2022 2021

#### **Sanitary Sewer Collection Systems**

1. Capacity, Management, Operation, and Maintenance (CMOM) Program
<ul><li>1.1 Do you have a CMOM program that is being implemented?</li><li>Yes</li></ul>
o No
If No, explain:
i 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
O No (30 points)
o 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:
Clean 5000 feet of sewer
Did you accomplish them?  ● Yes
o 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?  POTW 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

#### North Freedom Wastewater Treatment Facility Last Updated: Reporting For: 6/17/2022 2021 ☐ 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 ☑ 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: 0 ☒ 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: 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 25 % of system/year % of system/year Root removal 1 0 % of system/year Flow monitoring % of system/year Smoke testing Sewer line % of system/year televising Manhole 25 % of system/year inspections Lift station O&M 25 # per L.S./year Manhole % of manholes rehabbed rehabilitation Mainline 0 % of sewer lines rehabbed rehabilitation Private sewer inspections % of system/year Private sewer I/I removal % of private services

If Yes, please describe:

#### North Freedom Wastewater Treatment Facility Last Updated: Reporting For: 6/17/2022 2021 River or water % of pipe crossings evaluated or maintained crossings 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. 25.48 Total actual amount of precipitation last year in inches 39.1 Annual average precipitation (for your location) 9.9 Miles of sanitary sewer 2 Number of lift stations 0 Number of lift station failures 0 Number of sewer pipe failures 0 Number of basement backup occurrences 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) 0.00 Basement backups (number/sewer mile) 0.00 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 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? o 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? o Yes No

Sealing manhole lids to prevent ground water from entering system

# North Freedom Wastewater Treatment Facility Last Updated: Reporting For: 6/17/2022 2021 5.3 Explain any infiltration/inflow (I/I) changes this year from previous years: None 5.4 What is being done to address infiltration/inflow in your collection system?

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

#### **North Freedom Wastewater Treatment Facility**

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2021

#### **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	Α	4	5	20
Ammonia	Α	4	5	20
Phosphorus	Α	4	3	12
Ponds	В	3	7	21
Biosolids	Α	4	5	20
Staffing/PM	A	4	1	4
OpCert	Α	4	1	4
Financial	Α	4	1	4
Collection	A	4	3	12
TOTALS			44	139
GRADE POINT AVE	RAGE (GPA) = 3.16	•	•	

#### 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)

North Freedom Wastewater Treatment Facility	Last Updated: Reporting For 6/17/2022 <b>2021</b>
Resolution or Owner's Statement	
Name of Governing Body or Owner:	So passed on this 11th day of July, 2022 on a motion presented by Trustee A. Weiller and seconded by Trustee
Date of Resolution or Action Taken:	President Andrew Dear
Resolution Number:	Attest:
Date of Submittal:	Nichola Preunig, Clerk/Treasurer
ACTIONS SET FORTH BY THE GOVERNING BOD'SECTIONS (Optional for grade A or B. Required Influent Flow and Loadings: Grade = A	Y OR OWNER RELATING TO SPECIFIC CMAR for grade C, D, or F):
Effluent Quality: BOD: Grade = D	
Effluent Quality: TSS: Grade = A	
Effluent Quality: Ammonia: Grade = A	
Effluent Quality: Phosphorus: Grade = A	
Ponds: Grade = B	
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)	on Systems if SSOs were reported)
ACTIONS SET FORTH BY THE GOVERNING BODY GRADE POINT AVERAGE AND ANY GENERAL CO (Optional for G.P.A. greater than or equal to 3.00, re G.P.A. = 3.16	MMENTS