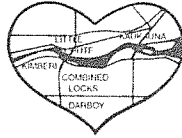


**DISTRICT DIRECTOR:**

Brian M. Helminger

**SERVING:**

Combined Locks  
Kaukauna  
Kimberly  
Little Chute  
Darboy S.D.

**COMMISSIONERS:**

David J. Casper, President  
Bruce M. Siebers, Vice-Pres.  
Patrick E. Hennessey, Secretary  
Kevin P. Coffey  
John W. Sundelius

**Heart of the Valley****METROPOLITAN SEWERAGE DISTRICT**

801 THILMANY ROAD  
KAUKAUNA, WISCONSIN 54130  
(920) 766-5731 FAX (920) 766-5733  
[www.hvmsd.org](http://www.hvmsd.org)

June 5, 2023

**District Commissioners & District Director  
Heart of the Valley Metropolitan Sewerage District**

Gentlemen;

The State of Wisconsin Department of Natural Resources 2022 "Compliance Maintenance Annual Report" (CMAR) preparation has been completed. Please review the document, ask any questions, and be prepared to accept the document, by Resolution, at the June 13<sup>th</sup> Commission meeting.

In summary, regulatory compliance in 2022 was good. The District received a grade "A" in all sections of the CMAR except for the influent flow and loadings where the District received an "F". The District was over 90% of its rated design 11 times and over 100% of design 5 times. On the Resolution/Owners Statement please see the response.

The District has maintained, and must continue to maintain adequate funds to cover the amount required for the Replacement Fund Account.

Adoption of the CMAR Resolution #204 by the Commission at the June 13<sup>th</sup> meeting, and final submittal of completed forms and Resolution to the DNR will complete the CMAR compliance process for 2022.

Respectfully Submitted,

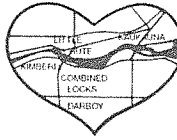
Kevin Skogman  
Director of Operations & Maintenance

**DISTRICT DIRECTOR:**

Brian M. Helminger

**SERVING:**

Combined Locks  
Kaukauna  
Kimberly  
Little Chute  
Darboy S.D.



**COMMISSIONERS:**

David J. Casper, President  
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**Heart of the Valley**

**METROPOLITAN SEWERAGE DISTRICT**

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**RESOLUTION NO. 204**

BE IT RESOLVED, that the Heart of the Valley Metropolitan  
Sewerage District Commission has reviewed and understands the  
2022 Compliance Maintenance Annual Report that is attached to this  
Resolution and will be submitted to the Wisconsin DNR.

APPROVED \_\_\_\_\_  
David J. Casper  
President

ATTEST \_\_\_\_\_  
Patrick E. Hennessey  
Secretary

The above Resolution was approved and adopted by the Heart of  
the Valley Metropolitan Sewerage District Commission on  
**June 13, 2023** by unanimous roll call vote.

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:

6/1/2023

2022

## 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	4.6559	x	351	x	8.34	=	13,648
February	4.6183	x	375	x	8.34	=	14,441
March	7.6188	x	256	x	8.34	=	16,258
April	9.0765	x	184	x	8.34	=	13,961
May	7.1774	x	272	x	8.34	=	16,295
June	7.4021	x	247	x	8.34	=	15,236
July	5.9666	x	267	x	8.34	=	13,299
August	6.5886	x	275	x	8.34	=	15,091
September	6.3894	x	277	x	8.34	=	14,748
October	5.0823	x	301	x	8.34	=	12,777
November	6.1765	x	259	x	8.34	=	13,317
December	5.5175	x	295	x	8.34	=	13,593

### 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	11.9	x	90	=	10.71
		x	100	=	11.9
Design BOD, lbs/day	14651	x	90	=	13185.9
		x	100	=	14651

#### 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	1	0
February	1	0	0	1	0
March	1	0	0	1	1
April	1	0	0	1	0
May	1	0	0	1	1
June	1	0	0	1	1
July	1	0	0	1	0
August	1	0	0	1	1
September	1	0	0	1	1
October	1	0	0	0	0
November	1	0	0	1	0
December	1	0	0	1	0
Points per each		2	1	3	2
Exceedances		0	0	11	5
Points		0	0	33	10
<b>Total Number of Points</b>					<b>43</b>

43

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:

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2022

## 3. Flow Meter

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

- ☒ Yes

Enter last calibration date (MM/DD/YYYY)

2022-12-13

- ☐ 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

72,085

gallons

- ☐ No

Holding Tanks

- ☒ Yes

2,400,245

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.

The Plants receiving station enables the District to pump the waste at a controlled rate to the influent channel of the head works building controlling the impact to the treatment process.

## 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.

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:  
6/1/2023 2022

<p>6.2 Did your facility accept hauled industrial wastes, landfill leachate, etc.?</p> <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></div>	
---	--

Total Points Generated	43
Score (100 - Total Points Generated)	57
Section Grade	F

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:

6/1/2023

2022

## 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	10	1	0	0
February	30	27	11	1	0	0
March	30	27	15	1	0	0
April	30	27	11	1	0	0
May	30	27	12	1	0	0
June	30	27	9	1	0	0
July	30	27	13	1	0	0
August	30	27	11	1	0	0
September	30	27	11	1	0	0
October	30	27	12	1	0	0
November	30	27	10	1	0	0
December	30	27	10	1	0	0

\* Equals limit if limit is  $\leq 10$

Months of discharge/yr	12		
Points per each exceedance with 12 months of discharge		7	3
Exceedances		0	0
Points		0	0
<b>Total number of points</b>			<b>0</b>

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?

No 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)

2022-12-13

○ No

If No, please explain:

### 3. Treatment Problems

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

None.

### 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?

○ Yes

● No

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

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**2022**

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:

<b>Total Points Generated</b>	<b>0</b>
<b>Score (100 - Total Points Generated)</b>	<b>100</b>
<b>Section Grade</b>	<b>A</b>

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:

6/1/2023

2022

## 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	30	27	13	1	0	0
February	30	27	13	1	0	0
March	30	27	21	1	0	0
April	30	27	11	1	0	0
May	30	27	11	1	0	0
June	30	27	8	1	0	0
July	30	27	19	1	0	0
August	30	27	17	1	0	0
September	30	27	21	1	0	0
October	30	27	24	1	0	0
November	30	27	18	1	0	0
December	30	27	13	1	0	0

\* Equals limit if limit is <= 10

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

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?

No Violations.

<b>Total Points Generated</b>	0
<b>Score (100 - Total Points Generated)</b>	100
<b>Section Grade</b>	<b>A</b>

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:

6/1/2023

2022

## 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	10		.467	0					
February	10		.5	0					
March	10		.491	0					
April	11		.835	0					
May	11		1.396	0					
June	4.4		.859	0					
July	4.4		.367	0					
August	4.4		.409	0					
September	4.4		.381	0					
October	18		1.014	0					
November	18		.391	0					
December	18		.538	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
<b>Total Number of Points</b>									<b>0</b>

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?

No Violation.

<b>Total Points Generated</b>	0
<b>Score (100 - Total Points Generated)</b>	100
<b>Section Grade</b>	<b>A</b>

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:

6/1/2023

2022

## 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	1	0.325	1	0
February	1	0.334	1	0
March	1	0.373	1	0
April	1	0.213	1	0
May	1	0.223	1	0
June	1	0.177	1	0
July	1	0.333	1	0
August	1	0.361	1	0
September	1	0.405	1	0
October	1	0.544	1	0
November	1	0.421	1	0
December	1	0.361	1	0
Months of Discharge/yr			12	
Points per each exceedance with 12 months of discharge:				10
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?

No Violations.

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

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:

6/1/2023

2022

## 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:

### 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. 008 - Class B Liquid 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		41	75														0	0
Cadmium		39	85														0	0
Copper		1500	4300														0	0
Lead		300	840														0	0
Mercury		17	57														0	0
Molybdenum	60		75													0		0
Nickel	336		420													0		0
Selenium	80		100													0		0
Zinc		2800	7500														0	0

##### Outfall No. 003 - Class A Liquid 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		41	75	7			<8.6			<9.3			2.5				0	0
Cadmium		39	85	1.4			<.78			.85			.29				0	0
Copper		1500	4300	523			565			513			110				0	0
Lead		300	840	27.5			29.1			21.7			5.6				0	0
Mercury		17	57	.21			.41			.34			.22				0	0
Molybdenum	60		75	13.5			16.7			12			4.7			0		0
Nickel	336		420	38.8			32.9			31.5			8.1			0		0
Selenium	80		100	6.3			<7.7			<8.3			1.9			0		0
Zinc		2800	7500	956			1160			1020			240				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)
- 1-2 (10 Points)
- > 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)

- Yes

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

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- ☐ No (10 points)
  - ☒ N/A - Did not exceed limits or no HQ limit applies (0 points)
  - ☐ 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

- ☒ 0 (0 Points)
- ☐ 1 (10 Points)
- ☐ > 1 (15 Points)

0

3.1.4 Were biosolids land applied which exceeded the ceiling limit?

☐ Yes (20 Points)

☒ 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?

## 4. Pathogen Control (per outfall):

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.

Outfall Number:	003
Biosolids Class:	A
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	07/01/2022 - 09/30/2022
Density:	13
Sample Concentration Amount:	MPN/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Thermophilic Aerobic Digestion
Process Description:	Auto-Thermophilic Digestion

0

4.2 If exceeded Class B limit or did not meet the process criteria at the time of land application.

4.2.1 Was the limit exceeded or the process criteria not met at the time of land application?

☐ Yes (40 Points)

☒ No

If yes, what action was taken?

## 5. Vector Attraction Reduction (per outfall):

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.

Outfall Number:	003
Method Date:	09/30/2022
Option Used To Satisfy Requirement:	Injection when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

5.2 Was the limit exceeded or the process criteria not met at the time of land application?

☐ Yes (40 Points)

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

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2022

<ul style="list-style-type: none"><li>● No</li></ul> <p>If yes, what action was taken?</p> <div></div>	0
<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> <ul style="list-style-type: none"><li>● <math>\geq 180</math> days (0 Points)</li><li>○ 150 - 179 days (10 Points)</li><li>○ 120 - 149 days (20 Points)</li><li>○ 90 - 119 days (30 Points)</li><li>○ <math>&lt; 90</math> days (40 Points)</li><li>○ N/A (0 Points)</li></ul> <p>6.2 If you checked N/A above, explain why.</p> <div></div>	0
<p>7. Issues</p> <p>7.1 Describe any outstanding biosolids issues with treatment, use or overall management:</p> <div></div>	

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

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:

6/1/2023

2022

## 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"><li>● Yes</li><li>○ No</li></ul> <p>If No, please explain:</p> <div></div> <p>Could use more help/staff for:</p> <div></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"><li>● Yes</li><li>○ No</li></ul> <p>If No, please explain:</p> <div></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"><li>● Yes (Continue with question 2) <input type="checkbox"/><input type="checkbox"/></li><li>○ No (40 points) <input type="checkbox"/><input type="checkbox"/></li></ul> <p>If No, please explain, then go to question 3:</p> <div></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"><li>● Yes</li><li>○ No (10 points)</li></ul> <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"><li>● Yes<ul style="list-style-type: none"><li>○ Paper file system</li><li>○ Computer system</li><li>● Both paper and computer system</li></ul></li><li>○ No (10 points)</li></ul>	0
<p>3. O&amp;M Manual</p> <p>3.1 Does your plant have a detailed O&amp;M and Manufacturer Equipment Manuals that can be used as a reference when needed?</p> <ul style="list-style-type: none"><li>● Yes</li><li>○ No</li></ul>	
<p>4. Overall Maintenance /Repairs</p> <p>4.1 Rate the overall maintenance of your wastewater plant.</p> <ul style="list-style-type: none"><li>○ Excellent</li><li>● Very good</li><li>○ Good</li><li>○ Fair</li><li>○ Poor</li></ul> <p>Describe your rating:</p>	

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

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The District has a Total Electronic Asset Management System (TEAMS) that enables the District to track all maintenance. The maintenance program that the District has show's how well the plant continues to perform. All team member involved with preventative maintenance and major rebuilds of equipment or replacement of equipment are diligent in the maintenance and take pride in the plant operating efficiently.	
---	--

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

# Compliance Maintenance Annual Report

Heart Of The Valley Metro Sewerage District

Last Updated: Reporting For:

6/1/2023

2022

## 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:

BRIAN M HELMINGER

Certification No:

28032

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		
		Advanced	OIT	Basic	Advanced
A1	Suspended Growth Processes	X			X
A2	Attached Growth Processes				X
A3	Recirculating Media Filters				
A4	Ponds, Lagoons and Natural		X		
A5	Anaerobic Treatment Of Liquid				
B	Solids Separation	X			X
C	Biological Solids/Sludges	X			X
P	Total Phosphorus	X			X
N	Total Nitrogen				
D	Disinfection	X			X
L	Laboratory	X			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.)

● 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

4.1 If you had a designated operator-in-charge, was the operator-in-charge earning Continuing Education Credits at the following rates?

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OIT and Basic Certification: ○ Averaging 6 or more CECs per year. ○ Averaging less than 6 CECs per year. Advanced Certification: ● Averaging 8 or more CECs per year. ○ Averaging less than 8 CECs per year.	
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Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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## Financial Management

<b>1. Provider of Financial Information</b> Name: <input type="text" value="Kevin Skogman (Provided by Erickson &amp; Associates)"/> Telephone: <input type="text" value="(920) 766-5731"/> (XXX) XXX-XXXX E-Mail Address (optional): <input type="text" value="kevin.skogman@hvmsd.org"/>		
<b>2. Treatment Works Operating Revenues</b> 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) <input type="checkbox"/> ○ No (40 points) If No, please explain: <input type="text"/> 2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised? Year: <input type="text" value="2022"/> ● 0-2 years ago (0 points) <input type="checkbox"/> ○ 3 or more years ago (20 points) <input type="checkbox"/> ○ 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)		0
<b>REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]</b>		
<b>3. Equipment Replacement Funds</b> 3.1 When was the Equipment Replacement Fund last reviewed and/or revised? Year: <input type="text" value="2022"/> ● 1-2 years ago (0 points) <input type="checkbox"/> ○ 3 or more years ago (20 points) <input type="checkbox"/> ○ N/A If N/A, please explain: <input type="text"/> 3.2 Equipment Replacement Fund Activity <b>3.2.1 Ending Balance Reported on Last Year's CMAR</b> 3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.) 3.2.3 Adjusted January 1st Beginning Balance 3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)		<div>\$ <input type="text" value="7,724,013.00"/></div> <div>\$ <input type="text" value="0.00"/></div> <div>\$ <input type="text" value="7,724,013.00"/></div> <div>+ \$ <input type="text" value="737,629.00"/></div>

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

- \$ 320,334.00

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

\$ 8,141,308.00

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

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

Equipment replaced during the year was \$320,334

3.3 What amount should be in your Replacement Fund? \$ 8,141,308.00

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	WPDES TMDL compliance - with permit re issuance and TMDL limits HOV has selected effluent disk filters for permit compliance with low level phosphorus.  The District and its consultant Donohue is in the design phase of the project and anticipates bidding the project in the last quarter of 2021. The disk filters will be installed in the existing building that used to house the tertiary filters. A Clean Water Fund loan is necessary for this project.	\$12,500,000	2022
2	Capital improvements to the HOV main interceptor sewer and its marine manholes identified and prioritized by the Interceptor action plan.  Work is in progress and the final scope of the projects are known. In the near future the project will be going out for bids. Once awarded improvements may start late this year.	\$22,000,000	2023

## 5. Financial Management General Comments

### ENERGY EFFICIENCY AND USE

## 6. Collection System

### 6.1 Energy Usage

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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:

	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	12,659	
February	12,354	
March	9,593	
April	5,907	
May	1,483	
June	1,276	
July	1,540	
August	1,430	
September	1,301	
October	2,000	
November	5,060	
December	9,567	
Total	64,170	0
Average	5,348	0

6.1.2 Comments:

The electricity consumed is from member communities meter stations that the District owns. There are also two ventilation systems located on the District's interceptor for removing H<sub>2</sub>S.

## 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:

Electrical use is minimal, there is lighting, electric heat, exhaust fans and metering equipment.

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

● No

○ Yes

Year:

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By Whom:

Describe and Comment:

## 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?

None.

## 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	701,146	144.33	4,858	423.09	1,657	
February	613,229	129.31	4,742	404.35	1,517	
March	684,189	236.18	2,897	504.00	1,358	
April	680,908	272.30	2,501	418.83	1,626	
May	684,252	222.50	3,075	505.15	1,355	
June	670,215	222.06	3,018	457.08	1,466	
July	715,627	184.96	3,869	412.27	1,736	
August	725,707	204.25	3,553	467.82	1,551	
September	621,325	191.68	3,241	442.44	1,404	
October	704,734	157.55	4,473	396.09	1,779	
November	705,152	185.30	3,805	399.51	1,765	
December	737,293	171.04	4,311	421.38	1,750	
Total	8,243,777	2,321.46		5,252.01		0
Average	686,981	193.46	3,695	437.67	1,580	0

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

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- ☒ Mechanical Sludge Processing
- ☒ Nitrification
- ☒ SCADA System
- ☐ UV Disinfection
- ☒ Variable Speed Drives
- ☒ Other:

Biostyr, bio-solids pumping of high rate clarifiers in ACTI-FLO, Peak flow headworks, peak flow pumping to ACTI-FLO. Auto Thermophilic Aerobic Digestion of bio-solids.

## 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?

Replacement of fluorescent lighting with LED lighting. When replacing motors using energy efficient motors.

## 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:

2016

By Whom:

University of Wisconsin-Milwaukee Industrial Assessment Center

Describe and Comment:

Most of the recommended measures the District has implemented.

☐ Part of the facility

Year:

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By Whom:	<div></div>
Describe and Comment:	<div></div>

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

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## Sanitary Sewer Collection Systems

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

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

- ☒ Yes
- ☐ No

If No, explain:

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

- ☒ Yes
- ☐ No (30 points)
- ☐ N/A

If No or N/A, explain:

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

##### ☒ Goals [NR 210.23 (4)(a)]

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

Inspection of all land/river based manhole structures.

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?

2006-1

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

2020-10-13

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

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

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

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

- ☐ Equipment and replacement part inventories
- ☐ Up-to-date sewer system map
- ☐ A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation

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<div style="margin-bottom: 10px;"> <input checked="" type="checkbox"/> A description of routine operation and maintenance activities (see question 2 below)  <input type="checkbox"/> Capacity assessment program  <input type="checkbox"/> Basement back assessment and correction  <input type="checkbox"/> Regular O&amp;M training         </div> <div> <input checked="" type="checkbox"/> Design and Performance Provisions [NR 210.23 (4) (e)]<input type="checkbox"/><input type="checkbox"/>            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?  <input checked="" type="checkbox"/> State Plumbing Code, DNR NR 110 Standards and/or local Municipal Code Requirements  <input checked="" type="checkbox"/> Construction, Inspection, and Testing  <input type="checkbox"/> Others:  <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div> </div> <div style="margin-top: 10px;"> <input checked="" type="checkbox"/> Overflow Emergency Response Plan [NR 210.23 (4) (f)]<input type="checkbox"/><input type="checkbox"/>            Does your emergency response capability include:  <input checked="" type="checkbox"/> Responsible personnel communication procedures  <input checked="" type="checkbox"/> Response order, timing and clean-up  <input checked="" type="checkbox"/> Public notification protocols  <input type="checkbox"/> Training  <input type="checkbox"/> Emergency operation protocols and implementation procedures         </div> <div> <input checked="" type="checkbox"/> Annual Self-Auditing of your CMOM Program [NR 210.23 (5)]<input type="checkbox"/><input type="checkbox"/>  <input checked="" type="checkbox"/> Special Studies Last Year (check only those that apply):  <input checked="" type="checkbox"/> Infiltration/Inflow (I/I) Analysis  <input type="checkbox"/> Sewer System Evaluation Survey (SSES)  <input type="checkbox"/> Sewer Evaluation and Capacity Management Plan (SECAP)  <input type="checkbox"/> Lift Station Evaluation Report  <input checked="" type="checkbox"/> Others:  <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Antecedent Moisture Modeling for I/I analysis</div> </div>	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	5	% of system/year
Root removal	0	% of system/year
Flow monitoring	100	% of system/year
Smoke testing	0	% of system/year
Sewer line televising	10	% of system/year
Manhole inspections	100	% of system/year
Lift station O&M	0	# per L.S./year
Manhole rehabilitation	0	% of manholes rehabbed
Mainline rehabilitation	0	% of sewer lines rehabbed
Private sewer inspections	0	% of system/year
Private sewer I/I removal	0	% of private services

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River or water crossings

0

% of pipe crossings evaluated or maintained

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

## 3. Performance Indicators

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

28.66	Total actual amount of precipitation last year in inches
31.73	Annual average precipitation (for your location)
5.54	Miles of sanitary sewer
1	Number of lift stations
0	Number of lift station failures
0	Number of sewer pipe failures
0	Number of basement backup occurrences
0	Number of complaints
6.375	Average daily flow in MGD (if available)
9.076	Peak monthly flow in MGD (if available)
19.750	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)
1.4	Peaking factor ratio (Peak Monthly:Annual Daily Avg)
3.1	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:

I/I was significant last year, the District had no partially treated waste water divert around secondary treatment and blend with fully treated effluent. Still there were several rainfall events that the inflow was at or just below the maz million gallons say the secondary treatment could handle. I/I and the reduction of it remains a concern for the District.

### 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?

<b>Total Points Generated</b>	<b>0</b>
<b>Score (100 - Total Points Generated)</b>	<b>100</b>
<b>Section Grade</b>	<b>A</b>

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**2022**

## Grading Summary

WPDES No: 0031232

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	F	0	3	0
BOD/CBOD	A	4	10	40
TSS	A	4	5	20
Ammonia	A	4	5	20
Phosphorus	A	4	3	12
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
<b>TOTALS</b>			<b>37</b>	<b>136</b>
<b>GRADE POINT AVERAGE (GPA) = 3.68</b>				

### 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:

Heart of the Valley Metropolitan Sewerage Commission

Date of Resolution or  
Action Taken:

2023-06-13

Resolution Number:

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 = F

At first glance, there appears to be a major problem with BOD loadings that exceed the plant rated capacity presumably due to the upward trajectory in connections and organic loads within the District's sewer service area.

In 2022, the BOD load exceeded 90% capacity in 11 of 12 months and exceeded 100% capacity 5 out of 12 months. The fact that there were no permit violations for effluent BOD shows that additional loads well beyond the plant rated capacity are regularly encountered and being removed. This fact was noted and formed the basis for conducting a cold weather stress test of the biological process to determine what the "true" plant capacity might be. Heart of the Valley carried out the stress test in 2023 and the results showed a calculated capacity of 18,918 lbs/day of BOD. The District has petitioned DNR for a rerate and anticipates acceptance of the request. If approved, and in comparison with the 2022 loadings, there would have been no points assessed for 2022 BOD loadings including the 90% of design load criteria.

In addition to the rerate effort, HOVMSD has also worked to reduce loadings by working with dischargers with permits in the pretreatment program. The District has been working with two permitted dischargers that will reduce loadings and eliminate slug loadings on the biological process. In one case, a waste storage tank and metering pump system will deliver a 24/7 controlled discharge to HOVMSD and in the other case, a small volume yet high organic load side stream is being redirected and hauled off site rather than be released and treated by HOVMSD.

Finally, the District is currently well beyond the half way point in the installation of chemically enhanced effluent filters. The filters will provide a greater level of suspended solids and phosphorus removal to comply with TMDL mass limits. By virtue of removing additional solids, there will also be some degree of additional BOD removal as well. The filters are anticipated to be operational before year end 2023 and the project completed and closed out in 2024.

Effluent Quality: BOD: Grade = A

Effluent Quality: TSS: Grade = A

Effluent Quality: Ammonia: Grade = A

Effluent Quality: Phosphorus: Grade = A

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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)
<b>ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO THE OVERALL GRADE POINT AVERAGE AND ANY GENERAL COMMENTS</b> (Optional for G.P.A. greater than or equal to 3.00, required for G.P.A. less than 3.00) <b>G.P.A. = 3.68</b>