HARTFORD
WISCONSIN

CITY HALL • 109 NORTH MAIN STREET • HARTFORD, WI 53027

AGENDA
CITY OF HARTFORD UTILITY COMMITTEE
CITY HALL COUNCIL CHAMBERS
Monday, July 6, 2020
6:00 pm

This is a regularly scheduled meeting of the Utility Committee of the City of Hartford. Prior to this meeting, notice was given to the public by posting an agenda on the City Office Meeting Board, Library Bulletin Board, and Police Bulletin Board. In addition, the Daily News (the official City newspaper) was given notice of this meeting and an agenda was placed in their City Office mailbox at least 24 hours ago.

1) Call to Order
2) Public Comment Period
3) Update on electric service interruptions and water main breaks
4) Update on Commitment to Community changes
5) Update on WPPI recharge funds
6) Discussion and consideration of approving the 2019 Wastewater Treatment Plant Compliance Maintenance Annual Report by executing a Resolution and the Wastewater Plant and Collection Systems Director submitting the annual report to the Department of Natural Resources (Executive Summary attached)
7) Discussion and consideration of accepting the proposal from L.W. Allen, Inc. for the purchase, pipe replacement and installation of two Fairbanks 5 HP sewage pumps at a cost not to exceed $40,255 (Executive Summary attached)
8) Adjournment

"Persons with disabilities requiring special accommodations for attendance at the meeting should contact the City Clerk at least one (1) business day prior to the meeting."

"Members of the Common Council may attend the above meeting. Pursuant to State ex rel. Badke v. Greendale Village Board, 173 Wis. 2d 553, 494 N.W.2d 408 (1993) such attendance may be considered a meeting of the Common Council. This notice is given so that members of the Common Council

EXECUTIVE SUMMARY

RESOLUTION NO. _____

TITLE: A Resolution Adopting the 2019 DNR Wastewater Compliance Maintenance Annual Report (CMAR).

BACKGROUND: In accordance with the Wisconsin Department of Natural Resources Discharge Permit, staff has completed the 2019 Compliance Maintenance Annual Report (CMAR). These reports have been completed every year since 1986. The DNR ranks plant performance on a Grade Point Average (G.P.A.) with each grade defining a range of responses:

A = Voluntary Range
B = Voluntary Range
C = Recommended Range
D = Action Range
F = Action Range

Hartford's G.P.A. for 2019 was 4.0. In all categories Hartford received an A ranking in each CMAR reported category. The plant continues to run well, with plenty of remaining capacity, and will continue to serve the City's needs for a number of years.

FISCAL IMPACT: None

RECOMMENDATION: That authorized City Officials approve the 2019 Wastewater Treatment Plant Compliance Maintenance Annual Report by executing a Resolution and the Wastewater Plant and Collection Systems Director submitting the Annual Report to the Department of Natural Resources.

PREPARED BY: David Piquett — 6-25-2020
David Piquett — Date
Plant and Collection Systems Director

REVIEWED BY: Steve Volkert — 6-25-2020
Steve Volkert — Date
City Administrator

ROUTING: Utility Committee - July 6, 2020
Common Council - July 14, 2020

Compliance Maintenance Annual Report

Hartford Water Pollution Control Facility

Last Updated: 5/20/2020 Reporting For: **2019**

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	2.2705	x	104	x	8.34	=	1,969
February	2.1726	x	125	x	8.34	=	2,257
March	2.4295	x	105	x	8.34	=	2,121
April	2.4357	x	109	x	8.34	=	2,209
May	2.5594	x	85	x	8.34	=	1,816
June	2.2515	x	114	x	8.34	=	2,141
July	2.2632	x	110	x	8.34	=	2,079
August	2.0432	x	103	x	8.34	=	1,758
September	2.1802	x	111	x	8.34	=	2,026
October	3.2664	x	88	x	8.34	=	2,393
November	2.7043	x	96	x	8.34	=	2,161
December	2.3738	x	74	x	8.34	=	1,462

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	5.5	x	90	=	4.95
		x	100	=	5.5
Design BOD, lbs/day	6500	x	90	=	5850
		x	100	=	6500

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	0	0
April	1	0	0	0	0
May	1	0	0	0	0
June	1	0	0	0	0
July	1	0	0	0	0
August	1	0	0	0	0
September	1	0	0	0	0
October	1	0	0	0	0
November	1	0	0	0	0
December	1	0	0	0	0
Points per each		2	1	3	2
Exceedances		0	0	0	0
Points		0	0	0	0
Total Number of Points					**0**

0

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Hartford Water Pollution Control Facility

Last Updated: 5/20/2020 Reporting For: **2019**

3. Flow Meter

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

● Yes Enter last calibration date (MM/DD/YYYY) 2019-08-08

○ 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 381810 gallons

○ No

Holding Tanks

● Yes 1682360 gallons

○ No

Grease Traps

○ Yes 0 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.

Plan Performance was not affected by any of the above.

6. Pretreatment

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

○ Yes

● No

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

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

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○ Yes
● No

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

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

Compliance Maintenance Annual Report

Hartford Water Pollution Control Facility

Last Updated: 5/20/2020 Reporting For: **2019**

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	10	10	0	1	0	0
February	10	10	0	1	0	0
March	10	10	0	1	0	0
April	10	10	0	1	0	0
May	5	5	0	1	0	0
June	5	5	0	1	0	0
July	5	5	0	1	0	0
August	5	5	0	1	0	0
September	5	5	0	1	0	0
October	5	5	0	1	0	0
November	10	10	0	1	0	0
December	10	10	0	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?

2. Flow Meter Calibration

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

- ● Yes — Enter last calibration date (MM/DD/YYYY): 2019-08-08
- ○ 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

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If Yes, please explain:

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

- ○ Yes
- ● No

If Yes, please explain:

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

- ○ Yes
- ○ No
- ● N/A

Please explain unless not applicable:

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

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Last Updated: 5/20/2020 Reporting For: **2019**

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	10	10	0	1	0	0
February	10	10	0	1	0	0
March	10	10	0	1	0	0
April	10	10	0	1	0	0
May	10	10	0	1	0	0
June	10	10	0	1	0	0
July	10	10	0	1	0	0
August	10	10	0	1	0	0
September	10	10	0	1	0	0
October	10	10	0	1	0	0
November	10	10	0	1	0	0
December	10	10	0	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?

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

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Last Updated: 5/20/2020 Reporting For: **2019**

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	4.3		0	0					
February	4.3		0	0					
March	4.3		0	0					
April	2.7		0	0					
May	1.2		0	0					
June	1.2		0	0					
July	1.2		0	0					
August	1.2		0	0					
September	1.2		0	0					
October	3.8		0	0					
November	4.3		0	0					
December	4.3		0	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**

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Last Updated: 5/20/2020 Reporting For: **2019**

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	.6	0.057	1	0
February	.6	0.054	1	0
March	.6	0.051	1	0
April	.6	0.051	1	0
May	.6	0.051	1	0
June	.6	0.051	1	0
July	.6	0.051	1	0
August	.6	0.050	1	0
September	.6	0.050	1	0
October	.6	0.050	1	0
November	.6	0.050	1	0
December	.6	0.050	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?

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

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Last Updated: 5/20/2020 Reporting For: **2019**

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:

2. Land Application Site

2.1 Last Year's Approved and Active Land Application Sites

2.1.1 How many acres did you have?

1813.60 acres

2.1.2 How many acres did you use?

146 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? **0**

- ○ 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. 003 - Aerobically digested 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	.17			5.82			5.05			10.8				0	0
Cadmium		39	85	<.048			<3.4			<3.6			<3.9				0	0
Copper		1500	4300	15.8			484			629			705				0	0
Lead		300	840	<.19			<13.8			<14.5			<15.4				0	0
Mercury		17	57	.007			.386			.377			.4317				0	0
Molybdenum	60		75	.22			5.92			9.65			12.3			0		0
Nickel	336		420	.47			17.9			18.7			22.4			0		0
Selenium	80		100	<.29			<27.5			<29			<30.9			0		0
Zinc		2800	7500	9.38			292			380			447				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)

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- ○ 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
- ○ 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:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2019 - 03/31/2019
Density:	623,679
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Aerobic Digestion
Process Description:	Aerobic digestion in a well mixed digester

Outfall Number:	**003**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2019 - 12/31/2019
Density:	275,175
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Aerobic Digestion
Process Description:	Aerobic Digestion in a well mixed digester.

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Outfall Number:	**003**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	04/01/2019 - 06/30/2019
Density:	275,175
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Air Drying
Process Description:	Aerobic Digestion in a well mixed digester.

Outfall Number:	**003**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	07/01/2019 - 09/30/2019
Density:	458,471
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Aerobic Digestion
Process Description:	Aerobic Digestion in a well mixed Digester.

Outfall Number:	**003**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	10/01/2019 - 12/31/2019
Density:	335,654
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Aerobic Digestion
Process Description:	AEROBIC DIGESTION in a well mixed digester.

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?

- o 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.

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Last Updated: 5/20/2020 Reporting For: **2019**

Outfall Number:	**003**
Method Date:	03/31/2019
Option Used To Satisfy Requirement:	Injection when land apply
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	
Results (if applicable):	

Outfall Number:	**003**
Method Date:	12/31/2019
Option Used To Satisfy Requirement:	Injection when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

Outfall Number:	**003**
Method Date:	06/30/2019
Option Used To Satisfy Requirement:	Injection when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

Outfall Number:	**003**
Method Date:	09/30/2019
Option Used To Satisfy Requirement:	Injection when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

Outfall Number:	**003**
Method Date:	12/31/2019
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?

o Yes (40 Points)

● No

If yes, what action was taken?

0

6. Biosolids Storage

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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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Last Updated: 5/20/2020 Reporting For: **2019**

Staffing and Preventative Maintenance (All Treatment Plants)

1. Plant Staffing

1.1 Was your wastewater treatment plant adequately staffed last year?

- ● Yes
- ○ No

If No, please explain:

Could use more help/staff for:

Could always use more help but I believe we are adequately staffed for now.

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

- ● Yes
- ○ No

If No, please explain:

2. Preventative Maintenance

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

- ● Yes (Continue with question 2) ☐☐
- ○ No (40 points)☐☐

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

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

- ● Yes
- ○ No (10 points)

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

- ● Yes
  - ○ Paper file system
  - ○ Computer system
  - ● Both paper and computer system
- ○ No (10 points)

0

3. O&M Manual

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

- ● Yes
- ○ No

4. Overall Maintenance /Repairs

4.1 Rate the overall maintenance of your wastewater plant.

- ○ Excellent
- ● Very good
- ○ Good
- ○ Fair
- ○ Poor

Describe your rating:

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Hartford Water Pollution Control Facility

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Plan staff does a GREAT job on PLANT AND COLLECTION SYSTEM p.m., but always feel there is room to improve.

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

Compliance Maintenance Annual Report

Hartford Water Pollution Control Facility

Last Updated: 5/20/2020 Reporting For: **2019**

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: DAVID R PIQUETT

Certification No: 31568

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				
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

2.2 Was the operator-in-charge certified at the appropriate level and subclass(es) to operate this plant? (Note: Certification in subclass SS, N and A5 not required in 2019; subclass SS is basic level only.)

- ● Yes (0 points)
- ○ No (20 points)

0

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

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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: ○ 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.	

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

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Financial Management

1. Provider of Financial Information

Name: Dawn Timm

Telephone: 262 673 8203 (XXX) XXX-XXXX

E-Mail Address (optional):

2. Treatment Works Operating Revenues

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

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

If No, please explain:

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

Year: 2018

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

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

- ● Yes (0 points)
- ○ No (40 points)

0

REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]

3. Equipment Replacement Funds

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

Year: 2019

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

If N/A, please explain:

3.2 Equipment Replacement Fund Activity

3.2.1 Ending Balance Reported on Last Year's CMAR		$ 615,546.49
3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)		$ 0.00
3.2.3 Adjusted January 1st Beginning Balance		$ 615,546.49
3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	+	$ 0.00

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3.2.5 Subtractions from Fund (e.g., equipment replacement, major repairs - use description box 3.2.6.1 below*) - $ 0.00

3.2.6 Ending Balance as of December 31st for CMAR Reporting Year $ 615,546.49

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

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

3.3 What amount should be in your Replacement Fund? $ 369,182.00

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	CIPP Lining rehabilitation of 1 mile of a 42 inch interceptor sewer	1800000	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: 14

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	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	15,345	54
February	15,616	46
March	36,060	39
April	14,621	42
May	11,384	41
June	9,901	153
July	12,141	53
August	8,459	29
September	8,016	50
October	10,381	45
November	33,929	49
December	16,093	52
Total	**191,946**	**653**
Average	**15,996**	**54**

6.1.2 Comments:

Month of June, Gas therm spike was due to one pump station that ran for 2 1/2 days on Back-up power due to power outage in area (118 therms consumed).

6.2 Energy Related Processes and Equipment

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

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

6.2.2 Comments:

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

- ● No
- ○ Yes

Year:

By Whom:

Describe and Comment:

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6.4 Future Energy Related Equipment

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

AS WE REPLACE PUMPS, WE LOOK FOR HIGHER EFFICENCY RATED PUMPS AND HAVE CONERTED SOME STATIONS TO VARIABLE SPEED DRIVES.

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	123,623	70.39	1,756	61.04	2,025	4,530
February	104,895	60.83	1,724	63.20	1,660	5,225
March	116,706	75.31	1,550	65.75	1,775	2,688
April	128,759	73.07	1,762	66.27	1,943	1,998
May	141,900	79.34	1,789	56.30	2,520	675
June	140,757	67.55	2,084	64.23	2,191	67
July	152,443	70.16	2,173	64.45	2,365	17
August	153,634	63.34	2,426	54.50	2,819	32
September	144,743	65.41	2,213	60.78	2,381	128
October	139,933	101.26	1,382	74.18	1,886	1,908
November	120,021	81.13	1,479	64.83	1,851	3,900
December	120,612	73.59	1,639	45.32	2,661	4,238
Total	**1,588,026**	**881.38**		**740.85**		**25,406**
Average	**132,336**	**73.45**	**1,831**	**61.74**	**2,173**	**2,117**

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:

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
- 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?

- o No
- ● Yes

☐ Entire facility

Year:

By Whom:

Describe and Comment:

☒ Part of the facility

Year: 2013

By Whom: WPPI, FOCUS ON ENERGY

Describe and Comment:

WENT TO DO CONTROL OF AERATION BASIN WITH HIGH EFFICENCY MOTORS AND INSTALLED VFD DRIVES.

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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:

On course to have entire system televised in 6 years (4th year) Continue to promote and fund the private property replacement incentive program. Educate the Public on non-disposable wipes.

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?

Sewer Use Ordinance

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 2018-03-03

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

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

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

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

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

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☒A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation
☒ A description of routine operation and maintenance activities (see question 2 below)
☒ Capacity assessment program
☒ Basement back assessment and correction
☒ Regular O&M training

☒ Design and Performance Provisions [NR 210.23 (4) (e)]☐☐
What standards and procedures are established for the design, construction, and inspection of the sewer collection system, including building sewers and interceptor sewers on private property?
☒ State Plumbing Code, DNR NR 110 Standards and/or local Municipal Code Requirements
☒ Construction, Inspection, and Testing
☐ Others:

☒ Overflow Emergency Response Plan [NR 210.23 (4) (f)]☐☐
Does your emergency response capability include:
☒ Responsible personnel communication procedures
☒ Response order, timing and clean-up
☒ Public notification protocols
☒ Training
☒ Emergency operation protocols and implementation procedures

☐ Annual Self-Auditing of your CMOM Program [NR 210.23 (5)]☐☐

☒ Special Studies Last Year (check only those that apply):
☐ Infiltration/Inflow (I/I) Analysis
☐ Sewer System Evaluation Survey (SSES)
☐ Sewer Evaluation and Capacity Managment Plan (SECAP)
☒ Lift Station Evaluation Report
☐ Others:

0

2. Operation and Maintenance

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

Cleaning	40	% of system/year
Root removal	20	% of system/year
Flow monitoring	100	% of system/year
Smoke testing	0	% of system/year
Sewer line televising	20	% of system/year
Manhole inspections	35	% of system/year
Lift station O&M	14	# per L.S./year
Manhole rehabilitation	8	% of manholes rehabbed
Mainline rehabilitation	5	% of sewer lines rehabbed
Private sewer inspections	10	% of system/year

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Private sewer I/I removal	5	% of private services
River or water crossings	100	% of pipe crossings evaluated or maintained

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

Replaced 10 complete (street main to house) Private property lateral through City's lateral incentive program. Replaced and additional 23 private property laterals from the street main to back of sidewalk in conjunction with street projects.Hartford has 5 inverted siphon sewers that run under the Rubicon river that are cleaned and inspected every year.

3. Performance Indicators

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

47.63	Total actual amount of precipitation last year in inches
32.87	Annual average precipitation (for your location)
95.3	Miles of sanitary sewer
14	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
2.3	Average daily flow in MGD (if available)
3.2	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)
1.4	Peaking factor ratio (Peak Monthly:Annual Daily Avg)
0.0	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 (MG)
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:

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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

If Yes, please describe:

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

More private property laterals replaced, grouting of manholes and chimney replacements have help reduce I&I.

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

televising 20 % OF ENTIRE COLLECTION SYSTEM PER YEAR. Staying VERY AGGRESIVE with repairs found during televising and wet weather inspections.

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

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Grading Summary

WPDES No: 0020192

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	A	4	3	12
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
TOTALS			**37**	**148**
GRADE POINT AVERAGE (GPA) = 4.00				

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

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Resolution or Owner's Statement

Name of Governing Body or Owner:

Date of Resolution or Action Taken:

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 = A

Effluent Quality: BOD: Grade = A

Effluent Quality: TSS: Grade = A

Effluent Quality: Ammonia: Grade = A

Effluent Quality: Phosphorus: 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. = 4.00

EXECUTIVE SUMMARY

TITLE: Grant Street Lift Station Pump Replacement

BACKGROUND: The Grant Street Lift Station Rehabilitation and Pump replacement was approved under the 2020 Sewer Utility Capital Improvements program. In conjunction with Hartford Electric's Overhead power rebuild of the area, equipment needs to be upgraded from single phase to three phase. Request for proposals were sent to three Pump Distributors with L.W. Allen coming in with the low proposal:

L.W. Allen, - Madison, WI	**$40,255.00**
William/Reid, - Germantown, WI	**$41,133.00**
Flygt/Xylem, - Pewaukee, WI	**$54,120.00**

L.W. Allen has done excellent work for the Sewer Utility in the past, most notably being the Harrison street dewatering station.

FISCAL IMPACT: **$40,244.00** from the approved Sewer Utility 2020 Capital improvement program amount of $65,000.00 under Account No. 595-370-536286-59501

RECOMMENDATION: Staff recommends approval to accept the proposal from L.W. Allen, Inc. Madison, WI for the purchase, pipe replacement and installation of two, Fairbanks 5 HP sewage pumps at a cost not to exceed **$40,255.00**

PREPARED BY: David Piquett — 6-25-2020
Dave Piquett — Date
Plant and Collection Systems Director

REVIEWED BY: — 6/26/2020
Dawn Timm — Date
Finance Director/Treasurer

APPROVED BY: — 6/26/2020
Steve Volkert — Date
City Administrator

ROUTING: Utility Committee - July 6, 2020

PROPOSAL

L.W. ALLEN, INC.

A Full Service Distributor
608.222.8622

PUMPS – CONTROLS – REPAIR CENTER

4633 Tompkins Drive - Madison, WI 53716

Phone

Fax 608.222.9414

Hartford WWTP
109 North Main Street
Hartford, WI 53027

Attn: Dave

PROPOSAL ID:	06820HRB
REFERENCE:	Grant Street Fairbanks Pumps
LOCATION:	Hartford WWTP
BID DATE:	June 8, 2020

FREIGHT IS F.O.B. ORIGIN	TERMS: NET-30 DAYS PER ATTACHED TERMS AND CONDITIONS
☐ ALLOWED ☐ PREPAID & ADD ☑ COLLECT	PRICES DO NOT INCLUDE SALES OR USE TAXES

ITEM	QUAN	DESCRIPTION	TOTAL PRICE
		L.W. Allen is pleased to provide a quotation for the following equipment and services.	
A	1	Furnish and Install Two (2) Model 5432 Fairbanks Size 4" by 6" solids handling sewage pumps 5 HP, 1200, RPM, 3phase 460 volt. These pumps will be equipped with mechanical seals and seal filter kits. Included One (1) year warranty.	
		Demo and removal of old pumps and piping	
		2 – 4" plug valves	
		1 – 6" plug valve	
		1 – 4" check valve	
		New Stainless Steel piping	
		SST pipe supports	
		2 – concrete pads	
		6" connection for bypass pumping	
		Total Investment.....	**$ 40,255.00**
		Not Included: Freight, any electrical modifications, tests, by-pass pumping	