City of Stoughton, 381 E Main Street, Stoughton WI 53589

RESOLUTION FROM THE UTILTIES COMMITTEE TO THE STOUGHTON COMMON COUNCIL			
Authorizing and directing the proper City official(s) to approve the Stoughton Utilities 2017 Wastewater treatment facility and sanitary sewer collection system Compliance Maintenance Annual Report (CMAR).			
Committee Action:	Utilities Committee recommended Common Council approval 6-0		
Fiscal Impact:	None		
File Number:	R-124-2018	**Date Introduced:**	June 26, 2018

The City of Stoughton, Wisconsin, Common Council does proclaim as follows:

WHEREAS, it is in the best interests of the City of Stoughton for Stoughton Utilities to operate a wastewater treatment facility and sanitary sewer collection system to serve customers within the City of Stoughton, and

WHEREAS, Stoughton Utilities has prepared a 2017 CMAR in conformance with Chapter NR 208 of the Wisconsin Administrative Code, and

WHEREAS, Annual submittal of an electronic CMAR form (eCMAR) is required to be completed annually no later than June 30, and

WHEREAS, on June 21, 2018 the Stoughton Utilities Committee approved and recommended the approval of the proposed Stoughton Utilities 2017 Wastewater treatment facility and sanitary sewer collection system Compliance Maintenance Annual Report (CMAR) to the Common Council, now therefore

BE IT RESOLVED by the City of Stoughton Common Council that the proper city official(s) approve and adopt the Stoughton Utilities 2017 Wastewater treatment facility and sanitary sewer collection system Compliance Maintenance Annual Report (CMAR).

Council Action: ☐ **Adopted** ☐ **Failed** **Vote:** _____

Mayoral Action: ☐ **Accept** ☐ **Veto**

_____ _____

Tim Swadley, Mayor Date

Council Action: _____ ☐ **Override** **Vote:** _____

Cost analysis of an overhead to underground electric system conversion: Stoughton Utilities staff provided an educational presentation on the potential costs and rate impacts associated with an overhead to underground electric system conversion within the City of Stoughton. The benefits and challenges associated with underground distribution systems were discussed.

A summary of studies conducted by other utilities and states was provided, including findings by the states of North Carolina and Florida that found system conversions would require rate increases of 80% to 125%, finding by the City of Anaheim that a conversion would require a 4% monthly surcharge for the next fifty years, and findings from other states that conversions would cost each customer several thousand dollars.

An estimate of the potential cost impact to Stoughton Utilities customers if a system conversion were to be occur was provided, including:

- A construction-only estimate of $131,000,000 for a conversion of the system within the City of Stoughton, which does not include engineering, legal, and obtaining easements, and excludes the entire rural distribution system;
- A potential rate impact of a 27% increase within the first ten years, with continued annual increases of approximately 3% for the following 30 years;
- A potential annual increase of $355 for residential customers, $10,270 for commercial CP-1 customers, and $157,760 for industrial customers;
- The rate impact on rural customers, who constitute over 25% of Stoughton Utilities customer base yet are excluded from the project scope, may result in a special rate;
- Regulatory considerations, including Wisconsin Public Service Commission PSC 130.03 prohibiting municipal regulations requiring ratepayer-funded underground facilities for aesthetic reasons, and PSC 112.05 requiring PSC approval of the construction of electric utility facilities.

Discussion followed. Alderperson Regina Hirsch requested that the information presented to the committee also be presented to the Stoughton Common Council at a future meeting.

Stoughton Utilities personnel status update: Stoughton Utilities staff presented and discussed recent personnel changes effective May 27, 2018, including the promotion of Kent Thompson to the position of Water System Supervisor, the promotion of Bryce Sime to the position of Electric System Supervisor, and the promotion of Tony Wieczorek to the position of Lead Journeyman Lineman. Discussion followed.

Wastewater treatment facility and sanitary sewer collection system 2017 Compliance Maintenance Annual Report (CMAR): Stoughton Utilities staff presented and discussed the 2017 CMAR. Annual submittal of an electronic CMAR form (eCMAR) is required to be completed no later than June 30. Discussion followed. Motion by Alderperson Regina Hirsch, the motion seconded by Citizen Member Kym Ackerman, to approve the 2017 Compliance Maintenance Annual Report and recommend the approval and the adoption of the corresponding resolution to the Stoughton Common Council on June 26, 2018. The motion carried unanimously 6 to 0.

Utilities Committee future agenda items: Staff informed the committee that upcoming topics include governance, employee succession planning, and a presentation from WPPI Energy Senior

Stoughton Utilities

600 South Fourth Street P.O. Box 383
Stoughton, WI 53589-0383

Serving Electric, Water & Wastewater Since 1886

Date: June 12, 2018

To: Stoughton Utilities Committee

From: Brian G. Erickson
Stoughton Utilities Wastewater System Supervisor

Robert P. Kardasz, P.E.
Stoughton Utilities Director

Subject: Wastewater treatment facility and sanitary sewer collection system 2017 Compliance Maintenance Annual Report (CMAR)

Compliance Maintenance Annual Report (CMAR) requirements have been in existence since 1987, and the attached CMAR has been completed as required by Chapter NR 208 of the Wisconsin Administrative Code. Annual submittal of an electronic CMAR form (eCMAR) is required to be completed no later than June 30.

The CMAR is a self-evaluation tool that promotes the owner's awareness and responsibility for wastewater collection and treatment needs, measures the performance of a wastewater treatment works during a calendar year, and assesses its level of compliance with permit requirements.

The purpose of the CMAR is to evaluate the wastewater treatment system for problems or deficiencies. Management, operation, and maintenance activities are described. Owners identify proposed actions to prevent violations of WPDES permits and water quality degradation. The CMAR program also encourages actions that:

- Promote the owners' awareness and responsibility for wastewater collection and treatment needs.
- Maximize the useful life of wastewater treatment systems through improved operation & maintenance.
- Initiate formal planning, design and construction for system upgrades.

It is requested that the Stoughton Utilities Committee review and approve the annual Compliance Maintenance Annual Report, and recommend approval and adoption of the corresponding resolution to the Stoughton Common Council on June 26, 2018.

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

Influent Flow and Loading

1. Monthly Average Flows and (C)BOD Loadings

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

Outfall No. 701	Influent Monthly Average Flow, MGD	x	Influent Monthly Average (C)BOD Concentration mg/L	x	8.34	=	Influent Monthly Average (C)BOD Loading, lbs/day
January	1.0185	x	247	x	8.34	=	2,102
February	1.0495	x	278	x	8.34	=	2,435
March	1.0037	x	258	x	8.34	=	2,156
April	1.1891	x	237	x	8.34	=	2,351
May	1.2036	x	251	x	8.34	=	2,520
June	1.2331	x	275	x	8.34	=	2,833
July	1.3505	x	241	x	8.34	=	2,709
August	1.1987	x	251	x	8.34	=	2,510
September	1.0688	x	286	x	8.34	=	2,550
October	1.1306	x	283	x	8.34	=	2,671
November	1.0229	x	293	x	8.34	=	2,500
December	0.9739	x	263	x	8.34	=	2,137

2. Maximum Monthly Design Flow and Design (C)BOD Loading

2.1 Verify the design flow and loading for your facility.

Design	Design Factor	x	%	=	% of Design
Max Month Design Flow, MGD	2.06	x	90	=	1.854
		x	100	=	2.06
Design (C)BOD, lbs/day	2655	x	90	=	2389.5
		x	100	=	2655

2.2 Verify the number of times the flow and (C)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 (C)BOD was greater than 90% of design	Number of times (C)BOD was greater than 100% of design
January	1	0	0	0	0
February	1	0	0	1	0
March	1	0	0	0	0
April	1	0	0	0	0
May	1	0	0	1	0
June	1	0	0	1	1
July	1	0	0	1	1
August	1	0	0	1	0
September	1	0	0	1	0
October	1	0	0	1	1
November	1	0	0	1	0
December	1	0	0	0	0
Points per each		2	1	3	2
Exceedances		0	0	8	3
Points		0	0	24	6
Total Number of Points					30

30

3. Flow Meter

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

● Yes — Enter last calibration date (MM/DD/YYYY): 03/23/2017

○ 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:

Industry surcharging for high strength dischargers. Lateral repairs, sump inspections and corrections, amalgam separator inspections and grease trap enforcements. We added an additional industry on to our daily sampling program.

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 faclity? If yes, indicate volume in gallons.

Septic Tanks

○ Yes _____ gallons

● No

Holding Tanks

○ Yes _____ gallons

● No

Grease Traps

○ Yes _____ gallons

● No

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

6. Pretreatment

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

○ Yes

● No

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

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

- ○ 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	30
Score (100 - Total Points Generated)	70
Section Grade	D

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

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	25	22.5	3	1	0	0
February	25	22.5	3	1	0	0
March	25	22.5	3	1	0	0
April	25	22.5	5	1	0	0
May	25	22.5	3	1	0	0
June	25	22.5	3	1	0	0
July	25	22.5	3	1	0	0
August	25	22.5	2	1	0	0
September	25	22.5	3	1	0	0
October	25	22.5	3	1	0	0
November	25	22.5	2	1	0	0
December	25	22.5	2	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)

03/23/2017

○ 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

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

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

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	8	1	0	0
March	30	27	9	1	0	0
April	30	27	12	1	0	0
May	30	27	8	1	0	0
June	30	27	8	1	0	0
July	30	27	6	1	0	0
August	30	27	6	1	0	0
September	30	27	8	1	0	0
October	30	27	7	1	0	0
November	30	27	7	1	0	0
December	30	27	6	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

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

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	1.3	0.545	1	0
February	1.3	0.448	1	0
March	1.3	0.492	1	0
April	1.3	0.526	1	0
May	1.3	0.475	1	0
June	1.3	0.462	1	0
July	1.3	0.245	1	0
August	1.3	0.455	1	0
September	1.3	0.504	1	0
October	1.3	0.408	1	0
November	1.3	0.420	1	0
December	1.3	0.600	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

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

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?

1936.60 acres

2.1.2 How many acres did you use?

119 acres

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

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

- ○ Yes (30 points)
- ● No

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

- ● Yes
- ○ No (10 points)
- ○ N/A

0

3. Biosolids Metals

Number of biosolids outfalls in your WPDES permit:

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

Outfall No. 002 - 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			<3.4											0	0
Cadmium		39	85			1.1											0	0
Copper		1500	4300			410											0	0
Lead		300	840			25											0	0
Mercury		17	57			<1.2											0	0
Molybdenum	60		75			7.7										0		0
Nickel	336		420			16										0		0
Selenium	80		100			<4.5										0		0
Zinc		2800	7500			790											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
- ○ 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)

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?

0

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:	002
Biosolids Class:	B
Bacteria Type and Limit:	
Sample Dates:	01/01/2017 - 12/31/2017
Density:	
Sample Concentration Amount:	
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Mixed in anaerobic digestion tank's at 95 degrees F for more than 15 days.

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?

0

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.

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

Outfall Number:	002
Method Date:	12/31/2017
Option Used To Satisfy Requirement:	Injection when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

0

5.2 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?

6. Biosolids Storage

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

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

0

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

7. Issues

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

None

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

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

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:

We are using summer help to assist us with sewer maintenance.

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:

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018

Reporting For: 2017

We continue to have very little down time do to maintenance issues. We use Capital Improvement study to assist us with aging equipment and when to replace equipment before it gets problematic.

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

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

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 G ERICKSON

Certification No: 28016

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				
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	NA	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 2016; 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

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

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

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

Financial Management

1. Provider of Financial Information

Name: Jamin Friedl

Telephone: 608-877-7415 (XXX) XXX-XXXX

E-Mail Address (optional): jfriedl@stoughtonutilities.com

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: 2015

- ● 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: 2015

- ● 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		$ 1,096,288.00
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		$ 1,096,288.00
3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	+	$ 50,107.00

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 $ 1,146,395.00

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.

3.3 What amount should be in your Replacement Fund? $ 1,146,154.00

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	Phase II Ammonia Removal Project: This project might be permit driven and will include additional aeration and anaerobic tanks along with new blowers.	225,000.00	2022
2	West St sewer project.	253,000.00	2027
3	Addtional sludge storage tank project.	900,000.00	2026
4	Page St sewer project: Broadway to Chicago	410,000.00	2024
5	Phosphorus Bulk Chemical Storage Tank Project.	225,000.00	2022
6	Main Building / Garage Addition and Remodel	1,640,000.0	2026
7	2019 Sewer project. Lowell St. From Monroe to Page	228,000.00	2019
8	2019 Sewer Project. Monroe from Jefferson to Lowell	248,000.00	2019
9	2020 Sewer Project. Prospect St. From Page to Grant	130,000.00	2020
10	2020 Slip Lining project. Jefferson, Monroe alley and Mandt Park Way	100,000.00	2020
11	2018 Vernon St Project: Replace sewer main and manholes from Henry to Franklin Street including dead ends on Henry, Morris and Franklin. 2 spot repairs on Franklin 1150 feet of sewer mains.	250,000.00	2018
12	2020 Main Street sewer project Phase I: From Page to Van Buren Street	450,000.00	2020
13	Eastwood Lift Station; Pumps, controls and generator	400,000.00	2019
14	RAS Pump Replacement Project	275,000.00	2024
15	UV Disinfection Upgrade Project	175,000.00	2023

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: 6

	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	1,990	0
February	1,892	1
March	2,070	1
April	2,550	1
May	1,871	1
June	1,995	5
July	1,570	2
August	1,527	0
September	1,600	8
October	1,553	0
November	1,953	1
December	2,257	1
Total	22,828	21
Average	1,902	2

6.1.2 Comments:

6.2 Energy Related Processes and Equipment

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

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

6.2.2 Comments:

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

- No

○ Yes

Year:

By Whom:

Describe and Comment:

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 planned

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	66,225	31.57	2,098	65.16	1,016	4,616
February	65,535	29.39	2,230	68.18	961	4,506
March	56,375	31.11	1,812	66.84	843	1
April	58,784	35.67	1,648	70.53	833	5,496
May	57,317	37.31	1,536	78.12	734	0
June	64,305	36.99	1,738	84.99	757	5
July	59,935	41.87	1,431	83.98	714	2
August	62,101	37.16	1,671	77.81	798	0
September	63,004	32.06	1,965	76.50	824	7
October	62,901	35.05	1,795	82.80	760	109
November	58,244	30.69	1,898	75.00	777	183
December	56,965	30.19	1,887	66.25	860	1,021
Total	731,691	409.06		896.16		15,946
Average	60,974	34.09	1,809	74.68	823	1,595

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?

None Planned. We work with WPPI and Focus on all plant and lift station projects to make sure we get any incentives.

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: 2014

By Whom: WPPI and Focus on Energy

Describe and Comment:

Most of the WWTP operation has implemented energy efficiency standards. Newer motors, VFD's, D.O controls, Power monitors and SCADA controls.

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018

Reporting For: 2017

☐ Part of the facility

Year:

By Whom:

Describe and Comment:

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

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

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:

Flush 1/3 of the collection system, televising 10 percent the collection system. Replace 2,000 feet of sewer mains. Replace 10 manholes. Replace 10 laterals. Update our sewer use ordinance.

Did you accomplish them?

- ○ Yes
- ● No

If No, explain:

We came up just short of our televising and flushing goals. We will be fully staffed this year and should reach all our goals for this year. I may have had our goals a little high to begin with.

☐ 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?

Municipal Code of Ordinance

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 03/27/2018

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
- ☒ 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	25	% of system/year
Root removal	1	% of system/year
Flow monitoring	0	% of system/year
Smoke testing	0	% of system/year
Sewer line televising	5	% of system/year
Manhole inspections	5	% of system/year
Lift station O&M	52	# per L.S./year
Manhole rehabilitation	1	% of manholes rehabbed
Mainline rehabilitation	1	% of sewer lines rehabbed

Private sewer inspections	0	% of system/year
Private sewer I/I removal	1	% of private services
River or water crossings	0	% of pipe crossings evaluated or maintained

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

We updated our sewer use ordinance in 2017. We will be adding grease trap inspections to our collection system maintenance.

3. Performance Indicators

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

42.37	Total actual amount of precipitation last year in inches
34.48	Annual average precipitation (for your location)
59	Miles of sanitary sewer
6	Number of lift stations
0	Number of lift station failures
0	Number of sewer pipe failures
4	Number of basement backup occurrences
18	Number of complaints
1.119	Average daily flow in MGD (if available)
2.046	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)
0.07	Basement backups (number/sewer mile)
0.31	Complaints (number/sewer mile)
1.8	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) OFERFLOWS 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?

- ○ Yes
- ● No

If Yes, please describe:

5.2 Has infiltration/inflow and resultant high flows affected performance or created problems in your collection system, lift stations, or treatment plant at any time in the past year?

- ○ Yes
- ● No

If Yes, please describe:

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

I/I continues to go down each year with collection system improvements and sump pump inspections.

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

Sump pump inspections, Replacing manholes, laterals and sewer mains.

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

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

Grading Summary

WPDES No: 0020338

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	D	1	3	3
BOD/CBOD	A	4	10	40
TSS	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			32	119
GRADE POINT AVERAGE (GPA) = 3.72				

Notes:

A = Voluntary Range (Response Optional)

B = Voluntary Range (Response Optional)

C = Recommendation Range (Response Required)

D = Action Range (Response Required)

F = Action Range (Response Required)

Compliance Maintenance Annual Report

Stoughton Wastewater Treatment Facility

Last Updated: 5/16/2018 Reporting For: 2017

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 = D

We will continue to monitor our plant loadings. The past years we have had A's for our loadings. Because of the excessive rain fall in 2017 our flows were higher than in the past. We continue to replace our aging infrastructure and inspect sump connections. We will continue to work with our consulting engineer on plant improvements. The plant effectively meets our limits each month.

Effluent Quality: BOD: Grade = A

Effluent Quality: TSS: 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. = 3.72