

Compliance Maintenance Annual Report

Waukesha City

Last Updated: Reporting For:
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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. 702	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	10.2480	x	250	x	8.34	=	21,348
February	10.0681	x	202	x	8.34	=	16,921
March	11.2525	x	178	x	8.34	=	16,665
April	11.4725	x	179	x	8.34	=	17,105
May	9.5631	x	217	x	8.34	=	17,312
June	9.0106	x	283	x	8.34	=	21,272
July	8.4369	x	247	x	8.34	=	17,389
August	8.4488	x	309	x	8.34	=	21,775
September	8.8671	x	270	x	8.34	=	19,960
October	9.3878	x	355	x	8.34	=	27,769
November	9.1713	x	261	x	8.34	=	19,946
December	8.7245	x	236	x	8.34	=	17,153

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	18.5	x	90	=	16.65
		x	100	=	18.5
Design (C)BOD, lbs/day	29653	x	90	=	26687.7
		x	100	=	29653

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	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	1	0
November	1	0	0	0	0
December	1	0	0	0	0
Points per each		2	1	3	2
Exceedances		0	0	1	0
Points		0	0	3	0
Total Number of Points					3

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3. Flow Meter

3.1 Was the influent flow meter calibrated in the last year?
 Yes Enter last calibration date (MM/DD/YYYY)

No

If No, please explain:

4. Sewer Use Ordinance

4.1 Did your community have a sewer use ordinance that limited or prohibited the discharge of excessive conventional pollutants ((C)BOD, SS, or pH) or toxic substances to the sewer from industries, commercial users, hauled waste, or residences?

Yes

No

If No, please explain:

4.2 Was it necessary to enforce the ordinance?

Yes

No

If Yes, please explain:

5. Septage Receiving

5.1 Did you have requests to receive septage at your facility?

Septic Tanks

Holding Tanks

Grease Traps

Yes

Yes

Yes

No

No

No

5.2 Did you receive septage at your facility? If yes, indicate volume in gallons.

Septic Tanks

Yes gallons

No

Holding Tanks

Yes gallons

No

Grease Traps

Yes gallons

No

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

6. Pretreatment

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

Yes

No

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

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

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<p><input checked="" type="radio"/> Yes <input 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> <p>All hauled industrial wastes, including leachate, is subject to our Pretreatment program with site inspections, permitting, testing and monitoring.</p>	
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Total Points Generated	3
Score (100 - Total Points Generated)	97
Section Grade	A

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Effluent Quality and Plant Performance (BOD/CBOD)

1. Effluent (C)BOD Results

1.1 Verify the following monthly average effluent values, exceedances, and points for BOD or 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	4	1	0	0
May	10	10	0	1	0	0
June	10	10	0	1	0	0
July	8.5	8.5	0	1	0	0
August	8.5	8.5	0	1	0	0
September	8.2	8.2	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

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)

No

If No, please explain:

3. Treatment Problems

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

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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<p>If Yes, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
<p>4.2 At any time in the past year was there a failure of an effluent acute or chronic whole effluent toxicity (WET) test?</p> <p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p> <p>If Yes, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
<p>4.3 If the biomonitoring (WET) test did not pass, were steps taken to identify and/or reduce source(s) of toxicity?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <p><input checked="" type="radio"/> N/A</p> <p>Please explain unless not applicable:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>

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

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

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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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	5		.273548387	0					
February	5.2		.62	0					
March	6		.144516129	0					
April	5.6		.258	0					
May	4.9		.010645161	0					
June	3.1		.361	0					
July	2		.049677419	0					
August	2.1		.05483871	0					
September	2.9		.053666667	0					
October	4.5		.058064516	0					
November	5.4		.028	0					
December	5.1		.028709677	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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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	.7	0.1	1	0
February	.7	0.0	1	0
March	.7	0.1	1	0
April	.7	0.1	1	0
May	.7	0.1	1	0
June	.7	0.1	1	0
July	.7	0.1	1	0
August	.7	0.1	1	0
September	.7	0.1	1	0
October	.7	0.1	1	0
November	.7	0.1	1	0
December	.7	0.0	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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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?

2823.50 acres

2.1.2 How many acres did you use?

323.5 acres

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

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

Yes (30 points)

No

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

Yes

No (10 points)

N/A

3. Biosolids Metals

Number of biosolids outfalls in your WPDES permit:

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

Outfall No. 002 - Anaerobic Belt Pressed 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	6.8		8.8		5.1		5.8		3.8		4.5			0	0
Cadmium		39	85	.48		.6		.41		.71		<.26		<.53			0	0
Copper		1500	4300	757		651		623		719		668		652			0	0
Lead		300	840	36.9		27.9		26.1		28		25.6		26.4			0	0
Mercury		17	57	.32		.26		.51		.55		1.4		.86			0	0
Molybdenum	60		75	24.3		23		20.5		21		21.8		17.9		0		0
Nickel	336		420	71.3		54.2		56.3		60.4		38.8		42.9		0		0
Selenium	80		100	13.8		5.1		7		8		6.2		7.8		0		0
Zinc		2800	7500	1070		888		862		1040		1290		1220			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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<ul style="list-style-type: none"> ○ 1-2 (10 Points) ○ > 2 (15 Points) <p>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)</p> <ul style="list-style-type: none"> ○ 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) <p>3.1.3 Number of times any of the metals exceeded the ceiling limits = 0</p> <p>Exceedence Points</p> <ul style="list-style-type: none"> ● 0 (0 Points) ○ 1 (10 Points) ○ > 1 (15 Points) <p>3.1.4 Were biosolids land applied which exceeded the ceiling limit?</p> <ul style="list-style-type: none"> ○ Yes (20 Points) ● No (0 Points) <p>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?</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	0
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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:	01/01/2016 - 12/31/2016
Density:	
Sample Concentration Amount:	
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Centrifuge samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2016 - 03/31/2016
Density:	100,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Anaerobic Digestion
Process Description:	Belt press samples. Lab Certification Number: 721026460

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Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2016 - 02/29/2016
Density:	100,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Anaerobic Digestion
Process Description:	Belt press samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2016 - 12/31/2016
Density:	1,000,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Storage pile samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	03/01/2016 - 04/30/2016
Density:	93,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Belt press samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	03/01/2016 - 04/30/2016
Density:	4,600
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Storage pile samples. Lab Certification Number: 721026460

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Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	04/01/2016 - 06/30/2016
Density:	60,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Centrifuge samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	05/01/2016 - 06/30/2016
Density:	60,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Centrifuge samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	05/01/2016 - 06/30/2016
Density:	4,600
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Storage pile samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	07/01/2016 - 09/30/2016
Density:	6,500
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Anaerobic Digestion
Process Description:	Centrifuge samples. Lab Certification Number: 721026460

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Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	07/01/2016 - 08/31/2016
Density:	6,500
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Anaerobic Digestion
Process Description:	Centrifuge samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	09/01/2016 - 10/31/2016
Density:	620,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Anaerobic Digestion
Process Description:	Centrifuge samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	10/01/2016 - 12/31/2016
Density:	930,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Centrifuge samples. Lab Certification Number: 721026460

Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	11/01/2016 - 12/31/2016
Density:	930,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Centrifuge samples. Lab Certification Number: 721026460

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Outfall Number:	002
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	11/01/2016 - 12/31/2016
Density:	1,000,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Storage pile samples. Lab Certification Number: 721026460

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:	002
Method Date:	11/07/2016
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	> = 38
Results (if applicable):	49.30

Outfall Number:	002
Method Date:	12/31/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

Outfall Number:	002
Method Date:	02/29/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	
Results (if applicable):	

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Outfall Number:	002
Method Date:	03/31/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	
Results (if applicable):	
Outfall Number:	002
Method Date:	01/20/2016
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	> = 38
Results (if applicable):	40.20
Outfall Number:	002
Method Date:	01/20/2016
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	> = 38
Results (if applicable):	40.20
Outfall Number:	002
Method Date:	05/02/2016
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	> = 38
Results (if applicable):	46
Outfall Number:	002
Method Date:	04/30/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

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Outfall Number:	002
Method Date:	06/30/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

Outfall Number:	002
Method Date:	05/02/2016
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	> = 38
Results (if applicable):	46

Outfall Number:	002
Method Date:	06/30/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

Outfall Number:	002
Method Date:	05/02/2016
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	> = 38
Results (if applicable):	46

Outfall Number:	002
Method Date:	08/31/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	
Results (if applicable):	

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Outfall Number:	002
Method Date:	09/30/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	
Results (if applicable):	
Outfall Number:	002
Method Date:	09/20/2016
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	> = 38
Results (if applicable):	47.10
Outfall Number:	002
Method Date:	10/31/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	
Results (if applicable):	
Outfall Number:	002
Method Date:	11/07/2016
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	> = 38
Results (if applicable):	49.30
Outfall Number:	002
Method Date:	12/31/2016
Option Used To Satisfy Requirement:	Incorporation when land apply
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	
Results (if applicable):	

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Outfall Number:	002			
Method Date:	12/31/2016			
Option Used To Satisfy Requirement:	Incorporation when land apply			
Requirement Met:	Yes			
Land Applied:	Yes			
Limit (if applicable):				
Results (if applicable):				
Outfall Number:	002	0		
Method Date:	11/07/2016			
Option Used To Satisfy Requirement:	Volatile Solids Reduction			
Requirement Met:	Yes			
Land Applied:	Yes			
Limit (if applicable):	> = 38			
Results (if applicable):	49.30			
<p>5.2 Was the limit exceeded or the process criteria not met at the time of land application?</p> <p><input type="radio"/> Yes (40 Points)</p> <p><input checked="" type="radio"/> No</p> <p>If yes, what action was taken?</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>				
<p>6. Biosolids Storage</p> <p>6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site?</p> <p><input checked="" type="radio"/> >= 180 days (0 Points)</p> <p><input type="radio"/> 150 - 179 days (10 Points)</p> <p><input type="radio"/> 120 - 149 days (20 Points)</p> <p><input type="radio"/> 90 - 119 days (30 Points)</p> <p><input type="radio"/> < 90 days (40 Points)</p> <p><input type="radio"/> N/A (0 Points)</p> <p>6.2 If you checked N/A above, explain why.</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>				0
<p>7. Issues</p> <p>7.1 Describe any outstanding biosolids issues with treatment, use or overall management:</p> <div style="border: 1px solid black; padding: 5px;"> <p>Early snow fall in fall of 2016 shortened application season.</p> </div>				

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

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

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Most of our equipment has been replaced in our recent upgrade. We will be operating from a new O&M manual and developed a new computerized maintenance program.	
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Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	A

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Operator Certification and Education

<p>1. Operator-In-Charge</p> <p>1.1 Did you have a designated operator-in-charge during the report year?</p> <p>● Yes (0 points)</p> <p>○ No (20 points)</p> <p>Name: <input style="width: 150px;" type="text" value="JEFF HARENDA"/></p> <p>Certification No: <input style="width: 150px;" type="text" value="31618"/></p>	0																																																																																								
<p>2. Certification Requirements</p> <p>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?</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th rowspan="2">Sub Class</th> <th rowspan="2">SubClass Description</th> <th colspan="2">WWTP</th> <th colspan="2">OIC</th> </tr> <tr> <th>Advanced</th> <th>OIT</th> <th>Basic</th> <th>Advanced</th> </tr> </thead> <tbody> <tr><td>A1</td><td>Suspended Growth Processes</td><td style="text-align: center;">X</td><td></td><td></td><td style="text-align: center;">X</td></tr> <tr><td>A2</td><td>Attached Growth Processes</td><td></td><td></td><td></td><td style="text-align: center;">X</td></tr> <tr><td>A3</td><td>Recirculating Media Filters</td><td></td><td></td><td></td><td></td></tr> <tr><td>A4</td><td>Ponds, Lagoons and Natural</td><td></td><td style="text-align: center;">X</td><td></td><td></td></tr> <tr><td>A5</td><td>Anaerobic Treatment Of Liquid</td><td></td><td></td><td></td><td></td></tr> <tr><td>B</td><td>Solids Separation</td><td style="text-align: center;">X</td><td></td><td></td><td style="text-align: center;">X</td></tr> <tr><td>C</td><td>Biological Solids/Sludges</td><td style="text-align: center;">X</td><td></td><td></td><td style="text-align: center;">X</td></tr> <tr><td>P</td><td>Total Phosphorus</td><td style="text-align: center;">X</td><td></td><td></td><td style="text-align: center;">X</td></tr> <tr><td>N</td><td>Total Nitrogen</td><td></td><td></td><td></td><td></td></tr> <tr><td>D</td><td>Disinfection</td><td style="text-align: center;">X</td><td></td><td></td><td style="text-align: center;">X</td></tr> <tr><td>L</td><td>Laboratory</td><td style="text-align: center;">X</td><td></td><td></td><td style="text-align: center;">X</td></tr> <tr><td>U</td><td>Unique Treatment Systems</td><td></td><td></td><td></td><td></td></tr> <tr><td>SS</td><td>Sanitary Sewage Collection</td><td style="text-align: center;">X</td><td style="text-align: center;">NA</td><td style="text-align: center;">NA</td><td style="text-align: center;">NA</td></tr> </tbody> </table> <p>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.)</p> <p>● Yes (0 points)</p> <p>○ No (20 points)</p>	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	NA	NA	NA	0
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<p>3. Succession Planning</p> <p>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)?</p> <p><input checked="" type="checkbox"/> One or more additional certified operators on staff</p> <p><input type="checkbox"/> An arrangement with another certified operator</p> <p><input type="checkbox"/> An arrangement with another community with a certified operator</p> <p><input type="checkbox"/> An operator on staff who has an operator-in-training certificate for your plant and is expected to be certified within one year</p> <p><input type="checkbox"/> A consultant to serve as your certified operator</p> <p><input type="checkbox"/> None of the above (20 points)</p> <p>If "None of the above" is selected, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	0																																																																																								
<p>4. Continuing Education Credits</p>																																																																																									

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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

<p>1. Provider of Financial Information</p> <p>Name: <input style="width: 150px;" type="text" value="Rich Abbott"/></p> <p>Telephone: <input style="width: 150px;" type="text" value="(262)-524-3556"/> (XXX) XXX-XXXX</p> <p>E-Mail Address (optional): <input style="width: 300px;" type="text" value="rabbott@waukesha-wi.gov"/></p>																
<p>2. Treatment Works Operating Revenues</p> <p>2.1 Are User Charges or other revenues sufficient to cover O&M expenses for your wastewater treatment plant AND/OR collection system ?</p> <p><input checked="" type="radio"/> Yes (0 points)</p> <p><input type="radio"/> No (40 points)</p> <p>If No, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised?</p> <p>Year: <input style="width: 100px;" type="text" value="2016"/></p> <p><input checked="" type="radio"/> 0-2 years ago (0 points)</p> <p><input type="radio"/> 3 or more years ago (20 points)</p> <p><input type="radio"/> N/A (private facility)</p> <p>2.3 Did you have a special account (e.g., CFWP required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system?</p> <p><input checked="" type="radio"/> Yes (0 points)</p> <p><input type="radio"/> No (40 points)</p>	0															
<p>REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]</p>																
<p>3. Equipment Replacement Funds</p> <p>3.1 When was the Equipment Replacement Fund last reviewed and/or revised?</p> <p>Year: <input style="width: 150px;" type="text" value="2016"/></p> <p><input checked="" type="radio"/> 1-2 years ago (0 points)</p> <p><input type="radio"/> 3 or more years ago (20 points)</p> <p><input type="radio"/> N/A</p> <p>If N/A, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>																
<p>3.2 Equipment Replacement Fund Activity</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">3.2.1 Ending Balance Reported on Last Year's CMAR</td> <td style="width: 5%; text-align: right;">\$</td> <td style="width: 35%; text-align: right;"><input style="width: 150px;" type="text" value="3,020,199.43"/></td> </tr> <tr> <td>3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)</td> <td style="text-align: right;">\$</td> <td style="text-align: right;"><input style="width: 150px;" type="text" value="0.00"/></td> </tr> <tr> <td>3.2.3 Adjusted January 1st Beginning Balance</td> <td style="text-align: right;">\$</td> <td style="text-align: right;"><input style="width: 150px;" type="text" value="3,020,199.43"/></td> </tr> <tr> <td>3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)</td> <td style="text-align: right;">\$</td> <td style="text-align: right;"><input style="width: 150px;" type="text" value="792,775.00"/></td> </tr> <tr> <td></td> <td style="text-align: right;">+</td> <td></td> </tr> </table>	3.2.1 Ending Balance Reported on Last Year's CMAR	\$	<input style="width: 150px;" type="text" value="3,020,199.43"/>	3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)	\$	<input style="width: 150px;" type="text" value="0.00"/>	3.2.3 Adjusted January 1st Beginning Balance	\$	<input style="width: 150px;" type="text" value="3,020,199.43"/>	3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	\$	<input style="width: 150px;" type="text" value="792,775.00"/>		+		
3.2.1 Ending Balance Reported on Last Year's CMAR	\$	<input style="width: 150px;" type="text" value="3,020,199.43"/>														
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	+															

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

\$ 986,607.63

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

\$ 2,826,366.80

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.

\$815,629.49 UV upgrade construction
\$139,480.14 Phosphorus planning design
\$ 9,938.00 VFD replacements 400 bldg.
\$ 21,460.00 Thickened sludge pump(2)replacement
\$ 100.00 Permit

0

3.3 What amount should be in your Replacement Fund?

\$ 1,558,369.00

Please note: If you had a CWFPP 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	Major upgrade continued through 2016	41800000	2014
2	Construction Administration and post design services. Continued through 2016.	1207745	2014
3	UV disinfection upgrade-to continue into 2016.	3700000	2015
4	6-10 year facility plan upgrades, to include phosphorus treatment, cogeneration, and electrical upgrades.	12300000	2019
5	Replace two top thickened feed pumps and install on VFDs	70000	2016
6	Replace scum pump for final clarifiers in bldg. 240	16500	2017
7	Rehabilitate two final clarifiers not included in current upgrade	750000	2017
8	upgrade storm water pump station at WWTP	40000	2018
9	Replace five primary influent pumps at treatment plant	800000	2020
10	Eliminate two lift stations and their force mains with a gravity sewer line, or replace the pump stations and force mains with new. One of the stations (Greenmeadow) can cause a bottle neck during peak flows.	11,000,000	2018
11	Eliminate three lift stations on the south side of city consolidating into another by gravity.	14,000,000	2020
12	Eliminate and consolidate three lift stations on west side of city.	4,000,000	2021

5. Financial Management General Comments

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The upgrades relating to phosphorus are dependent upon final WQBEL feasibility study, change in water supply, and receiving streams. All items above are listed in our current 5yr. CIP budget. Project #10 above is currently under study to determine the most cost effective option.

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:

	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	123,665	6
February	94,081	15
March	92,686	3
April	107,875	33
May	86,540	4
June	75,562	16
July	74,496	0
August	70,120	23
September	74,960	3
October	78,774	3
November	88,045	15
December	96,962	20
Total	1,063,766	141
Average	88,647	13

6.1.2 Comments:

Natural gas use is only for 3 onsite back up generators. They are normally exercised weekly. We have three small grinder stations serving residences, and four of the same serving other city buildings which do not have separate power meters. Three Park buildings, and the police shooting range. The annual average electrical consumption for the residential units is 745kWk. So to estimate total collection system usage that would add 2,980kWh to the 1,063,766 which would be 1,066,746kWh.

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:

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Three pump stations have onsite natural gas back-up generators.

6.2.2 Comments:

Reducing I&I through our CMOM program will reduce flow and energy required.

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

No

Yes

Year:

2011

By Whom:

AECOM

Describe and Comment:

A study was done to look at eliminating 7-8 pump stations on the west side of city with a gravity interceptor. Energy use was evaluated at that time for those stations to factor in feasibility. The same was done to look at consolidating four stations on the S.W. side of city.

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?

More VFD's as stations are upgraded. Eliminating or consolidating stations. Reduce I&I.

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	765,739	317.69	2,410	661.79	1,157	32,865
February	746,600	291.97	2,557	490.71	1,521	41,291
March	802,138	348.83	2,300	516.62	1,553	25,503
April	737,010	344.18	2,141	513.15	1,436	27,326
May	705,107	296.46	2,378	536.67	1,314	21,621
June	758,161	270.32	2,805	638.16	1,188	11,538
July	778,886	261.54	2,978	539.06	1,445	6,636
August	738,026	261.91	2,818	675.03	1,093	560
September	939,265	266.01	3,531	598.80	1,569	1,789
October	751,934	291.02	2,584	860.84	873	4,603
November	797,716	275.14	2,899	598.38	1,333	10,314
December	756,938	270.46	2,799	531.74	1,424	32,177
Total	9,277,520	3,495.53		7,160.95		216,223
Average	773,127	291.29	2,683	596.75	1,326	18,019

7.1.2 Comments:

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We have two natural gas accounts, one is only for six of our back-up generators which totaled 11,612 therms of the 216,223 total. The other account has two back-up generators on it in addition to building and process heat. The generator portion would estimate to be 3,860 therms of total. meaning 200,751 therms were used for building and process heat. The back-up generators are exercised once per week. Construction was still taking place through 2016 so some of the energy was used for that as well.

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

Eight 300Kw natural gas powered back-up generators

7.2.2 Comments:

Our "primary influent" and "primary effluent" are pumped, not final effluent.

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?

We are planning on looking at the feasibility of co-generation.

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

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9.1 Has an Energy Study been performed for your treatment facility?

No

Yes

Entire facility

Year:

By Whom:

Describe and Comment:

Part of the facility

Year:

By Whom:

Describe and Comment:

Facility study included recommended energy efficiency improvements. Also separate power metering and gas utilization monitoring to make future evaluations more valuable.

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:

Maintain assets through rehabilitation and replacement program – rehabilitated / replaced
19,341 LF mainline, 7202 LF laterals
Clean 30% of sewers
Televise 10% of sewers
Inspect all pump stations weekly
Rehabilitate three pump stations
Rehabilitate 100 manholes

Did you accomplish them?

- Yes
- No

If No, explain:

Accomplished all items but televising due to scheduling with contractor. Moved work to 2017.

- 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?

Chapter 29

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

02/23/2017

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)]

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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:

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- Overflow Emergency Response Plan [NR 210.23 (4) (f)]

Does your emergency response capability include:

- Responsible personnel communication procedures
- Response order, timing and clean-up
- Public notification protocols
- Training
- Emergency operation protocols and implementation procedures

- Annual Self-Auditing of your CMOM Program [NR 210.23 (5)]
- Special Studies Last Year (check only those that apply):

- Infiltration/Inflow (I/I) Analysis
- Sewer System Evaluation Survey (SSES)
- Sewer Evaluation and Capacity Management Plan (SECAP)
- Lift Station Evaluation Report
- Others:

An odor control study was done for East Moreland Blvd.

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	94.3	% of system/year
Root removal	1	% of system/year
Flow monitoring	0	% of system/year
Smoke testing	0	% of system/year
Sewer line televising	2	% of system/year
Manhole inspections	1	% of system/year
Lift station O&M	50	# per L.S./year
Manhole rehabilitation	2	% of manholes rehabbed
Mainline rehabilitation		

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Private sewer inspections	<input type="text" value="2"/>	% of sewer lines rehabbed
Private sewer I/I removal	<input type="text" value="1"/>	% of system/year
River or water crossings	<input type="text" value="100"/>	% of pipe crossings evaluated or maintained

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

We had 71 after hours call-ins for lift station alarms in 2016. 29 of those were for a communication problem, 8 were for power outages due to a storm or other event, 34 were for either a mechanical or control issue which were able to be resolved in the field. None resulted in a failure. Lift station O&M includes a weekly inspection to test equipment and pump down wet wells. Wet wells are cleaned once per year at a minimum. We had 44 calls of back ups all but one were a problem with the owner's lateral.

3. Performance Indicators

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

<input type="text" value="36.65"/>	Total actual amount of precipitation last year in inches
<input type="text" value="34.61"/>	Annual average precipitation (for your location)
<input type="text" value="270"/>	Miles of sanitary sewer
<input type="text" value="40"/>	Number of lift stations
<input type="text" value="0"/>	Number of lift station failures
<input type="text" value="0"/>	Number of sewer pipe failures
<input type="text" value="1"/>	Number of basement backup occurrences
<input type="text" value="0"/>	Number of complaints
<input type="text" value="9.36"/>	Average daily flow in MGD (if available)
<input type="text" value="10.28"/>	Peak monthly flow in MGD (if available)
<input type="text"/>	Peak hourly flow in MGD (if available)

3.2 Performance ratios for the past year:

<input type="text" value="0.00"/>	Lift station failures (failures/year)
<input type="text" value="0.00"/>	Sewer pipe failures (pipe failures/sewer mile/yr)
<input type="text" value="0.01"/>	Sanitary sewer overflows (number/sewer mile/yr)
<input type="text" value="0.00"/>	Basement backups (number/sewer mile)
<input type="text" value="0.00"/>	Complaints (number/sewer mile)
<input type="text" value="1.1"/>	Peaking factor ratio (Peak Monthly: Annual Daily Avg)
<input type="text" value="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)
0	07/13/2016 12:00:00 PM - 08/31/2016 1:15:00 PM	A manhole 200 feet north of HWY 59 and Big Bend Rd intersection.	Plugged Sewer	0.2210 - 0.2210
1	08/30/2016 2:00:00 PM - 08/30/2016 2:01:00 AM	Centrifuge feed pipe in digester building near east entrance, only 5 gallons	Equipment Failure	0.0001 - 0.0001

** If there were any SSOs or TFOs that are not listed above, please contact the DNR and stop work on this section until corrected.

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What actions were taken, or are underway, to reduce or eliminate SSO or TFO occurrences in the future?

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In response to the minor TFO a pressure switch was replaced and all the new valve position indicators were marked for open vs. closed positions.

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:

Through November 2016, the monthly average difference in Clean Water Plant (CWP) influent versus Water Utility pumping was 3.673 MGD. This is higher than the historical (2005-2010) monthly difference of 3.440 MGD by 0.232 MGD. However, the precipitation through November 2016 has been 1.68 inches above the historical yearly average.

Although the plant experienced higher influent values for January and February due to the unusually high precipitation received in December 2015 and the overall precipitation for the year is above the historical average, the monthly average difference in CWP influent versus Water Utility pumping is trending very close to the historical monthly difference.

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

Lining or relaying of mainline sewer; lining or relaying of laterals within ROW, grouting of individual leaks in sewers; installation of chimney seals on rehabilitated manholes, lining of existing manholes; separate \$1M/year earmarked for lining of existing concrete sewers; televising investigation of laterals suspected of clear water discharge.

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

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Grading Summary

WPDES No: 0029971

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:

City of Waukesha

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)

Sanitary Infrastructure Field Verification & Acceptance Request forms must be submitted and approved prior to acceptance of sanitary infrastructure. This was developed and implemented by the City as a result of the SSO.

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