OFFICIAL NOTICE AND AGENDA



Notice is hereby given that the City of Stoughton Utilities Committee will hold a regular meeting on the date and at the time and location given below.

Meeting of: CITY OF STOUGHTON UTILITIES COMMITTEE

Date/Time: Monday, January 14, 2019 at 5:00 p.m.

Location: Edmund T. Malinowski Board Room, Stoughton Utilities Administration Office

600 South Fourth Street, Stoughton, Wisconsin

Members: Citizen Member Kym Ackerman, Alderperson Matt Bartlett, Citizen Member David

Erdman (Chair), Alderperson Regina Hirsch, Citizen Member John Kallas (Vice-

Chair), Alderperson Pat O'Connor, Mayor Tim Swadley

AGENDA:

CALL TO ORDER

CONSENT AGENDA

(All items are considered routine and will be enacted upon by one motion. There will be no separate discussion of these items unless a Stoughton Utilities Committee member so requests, in which event the item will be removed from the consent agenda and be considered on the regular agenda.)

- a. Draft Minutes of the November 27, 2018 Special Utilities Committee Meeting
- b. Draft Minutes of the January 7, 2019 Special Utilities Committee Meeting
- c. Stoughton Utilities November Payments Due List Report
- d. Stoughton Utilities December Payments Due List Report
- e. Stoughton Utilities October 2018 Financial Summary
- f. Stoughton Utilities November 2018 Financial Summary
- g. Stoughton Utilities October 2018 Statistical Report
- h. Stoughton Utilities November 2018 Statistical Report
- i. Stoughton Utilities November 2018 Activities Report
- j. Stoughton Utilities December 2018 Activities Report
- k. Utilities Committee Annual Calendar
- 1. Communications

OLD BUSINESS

1. Status of the Utilities Committee recommendation(s) to the Stoughton Common Council (**Discussion**)

NEW BUSINESS

- 2. Selection of the Utilities Committee meeting date and time (Action)
- 3. Stoughton Utilities Water & Wastewater Billing Credits Policy (Action)
- 4. Stoughton Utilities Round-Up Program (Action)
- 5. Results from SU's annual LED holiday light customer incentive (**Discussion**)
- 6. Draft Wisconsin Department of Natural Resources (DNR) Wisconsin Pollutant Discharge Elimination System (WPDES) wastewater treatment facility permit (**Discussion**)
- 7. Utilities Committee future agenda item(s) (**Discussion**)

ADJOURNMENT

Notices Sent To:

Stoughton Utilities Committee Members Stoughton Utilities Assistant Director Brian Hoops cc: Stoughton City Attorney Matthew Dregne

Stoughton Common Council Members

Stoughton City Clerk Holly Licht

Stoughton Leadership Team

Stoughton Utilities Electric System Supervisor Bryce Sime

Stoughton Utilities Operations Superintendent Sean Grady

Stoughton Utilities Water System Supervisor Kent Thompson

Stoughton Utilities Wastewater System Supervisor Brian Erickson

Unified Newspaper Group - Stoughton Courier Hub

ATTENTION COMMITTEE MEMBERS: Two-thirds of members are needed for a quorum. The committee may only conduct business when a quorum is present. If you are unable to attend the meeting, please contact Brian Hoops via telephone at (608) 877-7412, or via email at BHoops@stoughtonutilities.com.

It is possible that members of, and possibly a quorum of members of other committees of the Common Council of the City of Stoughton may be in attendance at this meeting to gather information. No action will be taken by any such group(s) at this meeting other than the Stoughton Utilities Committee consisting of the members listed above. An expanded meeting may constitute a quorum of the Common Council.

Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For information, or to request such assistance, please contact Stoughton Utilities at (608) 873-3379.

Current and past Stoughton Utilities Committee documents, including meeting notices, meeting packets, and meeting minutes, are available for public download at http://stoughtonutilities.com/uc.

DRAFT STOUGHTON UTILITIES COMMITTEE SPECIAL MEETING MINUTES

Tuesday, November 27, 2018 – 5:30 p.m. Stoughton, WI

Page No. 1

Location: City of Stoughton Council Chambers

Stoughton Public Safety Building

321 South Fourth Street Stoughton, Wisconsin, 53589

<u>Members Present:</u> Citizen Member Kym Ackerman, Citizen Member David Erdman, Alderperson

Regina Hirsch, Citizen Member John Kallas, Alderperson Pat O'Connor,

Mayor Tim Swadley, Alderperson Nicole Wiessinger

Excused: None

Absent: None

<u>Others Present:</u> Alderperson Denise Duranczyk, Stoughton Director of Finance & Comptroller

Jamin Friedl, CPA, Stoughton Utilities Assistant Director Brian Hoops,

Stoughton Director of Planning & Development Rodney Scheel

<u>Call to Order:</u> Utilities Committee Chairperson David Erdman called the special Stoughton Utilities Committee Meeting to order at 5:00 p.m.

<u>Utilities Committee Consent Agenda:</u> Stoughton Utilities staff presented and discussed the Stoughton Utilities Committee consent agenda items. Discussion followed.

Motion by Hirsch, the motion seconded by O'Connor, to approve the following consent agenda items as presented: Draft Minutes of the October 15, 2018 Regular Utilities Committee Meeting, Stoughton Utilities Payments Due List Report, Stoughton Utilities September 2018 Financial Summary, Stoughton Utilities September 2018 Statistical Report, Stoughton Utilities October 2018 Activities Report, Utilities Committee Annual Calendar, Communications. The motion carried unanimously 7 to 0.

<u>Status of the Utilities Committee recommendation(s) to the Stoughton Common Council:</u> Stoughton Utilities staff presented and discussed the following items from the Stoughton Utilities Committee that were approved and/or placed on file by the Stoughton Common Council:

- Stoughton Utilities Payments Due List Report
- Stoughton Utilities Committee September 17, 2018 Meeting Minutes
- Stoughton Utilities July 2018 Financial Summary
- Stoughton Utilities August 2018 Financial Summary
- Stoughton Utilities August 2018 Statistical Report
- Proposed Stoughton Utilities 2019 budget and five year (2019-2023) Capital Improvement Plan (CIP)

Stoughton Utilities staff presented and discussed the following items from the Stoughton Utilities Committee that were presented to and tabled by the Stoughton Finance Committee:

Real estate listing of the vacant land located at 3201 McComb Rd

DRAFT STOUGHTON UTILITIES COMMITTEE SPECIAL MEETING MINUTES

Tuesday, November 27, 2018 – 5:30 p.m. Stoughton, WI Page No. 2

Real estate purchase and sale agreement from Junction 138, LLC for the purchase of the vacant land located at 3201 McComb Rd ***: Motion by O'Connor, the motion seconded by Ackerman, to go into closed session at 5:36 p.m. The motion carried unanimously 7 to 0.

Motion by O'Connor, the motion seconded by Wiessinger, to return to open session at 6:02 p.m. The motion carried unanimously 7 to 0.

Motion by Wiessinger, the motion seconded by O'Connor, to direct staff to move forward with the sale of the vacant land located at 3201 McComb Road, with details to be reviewed and approved by the Stoughton Finance Committee and Stoughton Common Council.. The motion carried unanimously 7 to 0.

*** The Utilities Committee may convene in closed session per State Statute 19.85(1)(e) for the purposes of deliberating or negotiating the purchase of public properties, the investing of public funds, or conducting other specified public business, whenever competitive or bargaining reasons deem a closed session necessary. The Utilities Committee may reconvene in an open session to discuss and take action on the subject matter discussed in the closed session.

<u>Utilities Committee future agenda items:</u> Staff informed the committee that upcoming topics include updates on the Utilities Director position transition, a review of the policy regarding wastewater billing credits, presentation of the Draft Wisconsin Department of Natural Resources (DNR) Wisconsin Pollutant Discharge Elimination System (WPDES) wastewater treatment facility permit, information regarding funding assistance programs for the replacement of privately owned lead water services, including a future ordinance mandating such replacement, and the award of RoundUp funds collected in the second half of 2018.

<u>Adjournment:</u> Motion by O'Connor, the motion seconded by Kallas, to adjourn the special Stoughton Utilities Committee Meeting at 6:05 p.m. The motion carried unanimously 7 to 0.

Respectfully submitted

Brian R. Hoops Stoughton Utilities Assistant Director

DRAFT STOUGHTON UTILITIES COMMITTEE SPECIAL MEETING MINUTES

Monday, January 7, 2019 - 5:30 p.m.

Stoughton, WI Page No. 1

Location: Edmund T. Malinowski Board Room

Stoughton Utilities Administration Office

600 South Fourth Street Stoughton, Wisconsin, 53589

Members Present: Citizen Member Kym Ackerman, Citizen Member David Erdman, Alderperson

Regina Hirsch, Citizen Member John Kallas, Alderperson Pat O'Connor,

Mayor Tim Swadley

Excused: None

Absent: None

<u>Others Present:</u> Alderperson Matt Bartlett, Stoughton Director of Human Resources & Risk

Management Amy Jo Gillingham, Stoughton Utilities Assistant Director Brian

Hoops

<u>Call to Order:</u> Utilities Committee Chairperson David Erdman called the special Stoughton Utilities Committee Meeting to order at 5:30 p.m.

<u>Hiring of Utilities Director position:</u> Chairperson David Erdman and Stoughton Director of Human Resources & Risk Management Amy Jo Gillingham presented and discussed the results of the interview process for the vacant Utilities Director position, and the pending contingent offer that has been made to a candidate. The Committee was informed that the candidate has requested that their identity be withheld pending notification of their current employer, and completion of an ongoing project. The Committee reviewed the candidate's resume and credentials, and discussion followed.

Motion by Hirsch, the motion seconded by Ackerman, to recommend the hiring of the candidate to the Stoughton Personnel Committee at their January 7, 2019 meeting, and the Stoughton Common Council at their January 8, 2019 meeting. The motion carried unanimously 6 to 0.

<u>Adjournment:</u> Motion by Kallas, the motion seconded by O'Connor, to adjourn the special Stoughton Utilities Committee Meeting at 5:52 p.m. The motion carried unanimously 6 to 0.

Respectfully submitted

Brian R. Hoops Stoughton Utilities Assistant Director Date:

Tuesday, December 04, 2018 09:13AM

Time: User:

SGUNSOLUS

Stoughton Utilities

Check Register Summary - Standard

Period: - As of: 12/4/2018

Page: Report: 1 of 8 03699W.rpt 7430 Company:

81 1			B		
Check Nbr	Type	Date	Amount Paid	Vendor ID / Name	Description
Company:	7430	0			
001706	НС	11/9/2018	790,399.01	009 WPPI	WPPI-Renewable Energy/WPPI-Renewable Energy/WPPI-Buy Back Solar Credit/WPPI-Shared Savings/WPPI-Shared Savings/WPPI-Large Power/WPPI-Large Power/WPPI-Support Services/WPPI-Support Services/More
001707	EP	11/9/2018	48,205.36	516 WELLS FARGO BANK	VO for check batch: 308666/VO for check batch: 308666
001708	HC	11/30/2018	484,69	003 Alliant Energy - Ach	Alliant Energy - Nov Ach/Alliant Energy - Nov Ach+
001709	НС	11/30/2018	180.00	318 PITNEY-BOWES INC-PURCHASE POWER	Pitney Bowes-Nov Ach/Pitney Bowes-Nov Ach/Pitney Bowes-Nov Ach/Pitney Bowes-Nov Ach/Pitney Bowes-Nov Ach/Pitney Bowes-Nov Ach/Pitney Bowes-Nov Ach/Pitney Bowes-Nov Ach
001710	НС	11/30/2018	283.80	856 GORDON FLESCH COMPANY, INC.	Gordon Flesch-Nov Ach/Gordon Flesch-Nov Ach/Gordon Flesch-Nov Ach/Gordon Flesch-Nov Ach/Gordon Flesch-Nov Ach/Gordon Flesch-Nov Ach/Gordon Flesch-Nov Ach/Gordon Flesch-Nov Ach
001711	НС	11/30/2018	459.01	007 TDS Metrocom - Ach	TDS Metrocom - Nov Ach/TDS Metrocom - Nov Ach
001712	НС	11/30/2018	2,568.30	001 Delta Dental - Ach	Delta Dental - Nov Ach/Delta Dental - Nov Ach/Delta Dental - Nov Ach/Delta Dental - Nov Ach/Delta Dental - Nov Ach/Delta Dental - Nov Ach
001713	НС	11/30/2018	136.20	952 AT&T	AT&T - Nov Ach/AT&T - Nov Ach/AT&T - Nov Ach/AT&T - Nov Ach

Date: Time: User:

Tuesday, December 04, 2018 09:13AM

SGUNSOLUS

Stoughton Utilities

Check Register Summary - Standard

Period: - As of: 12/4/2018

2 of 8 03699W,rpt 7430 Page: Report: Company:

				Period: - As of: 12/4/2018			
Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description		
001714	HC	11/30/2018	418.71	547 Charter Communications-Ach	Charter Comm-Nov Ach/Charter Comm-Nov Ach/Charter Comm-Nov Ach/Charter Comm-Nov Ach/Charter Comm-Nov Ach/Charter Comm-Nov Ach/Charter Comm-Nov Ach/Charter Comm-Nov Ach		
001715	HC	11/30/2018	1,140.45	002 Employee Benefits Corp - Ach	EBC - Nov Ach/EBC - Nov Ach		
001716	HC	11/30/2018	777.41	004 Us Cellular - Ach	Us Cellular - Nov Ach/Us Cellular - Nov Ach/Us Cellular - Nov Ach/Us Cellular - Nov Ach/Us Cellular - Nov Ach/Us Cellular - Nov Ach/Us Cellular - Nov Ach/Us Cellular - Nov Ach		
001717	НС	11/30/2018	30,52	421 FIRST DATA CHARGES	First Data Charges-Nov Ach/First Data Charges-Nov Ach/First Data Charges-Nov Ach/First Data Charges-Nov Ach/First Data Charges-Nov Ach/First Data Charges-Nov Ach/First Data Charges-Nov Ach/First Data Charges-Nov Ach		
001718	HC	11/30/2018	52,325.42	010 WI Dept. of Revenue Taxpayment-Ach	Dept of Rev-Nov Ach/Dept of Rev-Nov Ach		
001719	HC	11/30/2018	10,371.63	008 Payroll State Taxes - Ach	State Taxes-Nov Ach/State Taxes-Nov Ach/State Taxes-Nov Ach/State Taxes-Nov Ach/State Taxes-Nov Ach		
001720	НС	11/30/2018	54,731.35	025 Payroll Federal Taxes- Ach	Federal Taxes-Nov Ach/Federal Taxes-Nov Ach/Federal Taxes-Nov Ach/Federal Taxes-Nov Ach/Federal Taxes-Nov Ach/Federal Taxes-Nov Ach/Federal Taxes-Nov Ach/Federal Taxes-Nov Ach		
001721	HC	11/30/2018	54,550.68	010 WI Dept. of Revenue Taxpayment-Ach	Dept of Rev-Nov Ach/Dept of Rev-Nov Ach/Dept of Rev-Nov Ach/Dept of Rev-Nov Ach		
001722	НС	11/30/2018	10,357.75	020 Wells Fargo Bank-Ach	Client Analysis-Nov Ach/Client Analysis-Nov Ach/Client Analysis-Nov Ach/Client Analysis-Nov Ach/Client Analysis-Nov Ach/Client Analysis-Nov Ach/Client Analysis-Nov Ach/Client Analysis-Nov Ach		
025954	СК	11/1/2018	43,809.95	131 CITY OF STOUGHTON	City Stoton-Stormwater/City Stoton-Stormwater		
025955	CK	11/1/2018	512.00	166 INKWORKS, INC.	Inkworks-EA Inserts/Inkworks-EA Inserts/Inkworks-EA Inserts/Inkworks-EA Inserts/Inkworks-EA Inserts/Inkworks-EA Inserts		

Date:

Tuesday, December 04, 2018 09:13AM

Time: 09:13AM User: SGUNSOLUS

Stoughton Utilities

Check Register Summary - Standard

Period: - As of: 12/4/2018

Page: 3 of 8
Report: 03699W.rpt
Company: 7430

Period: - As of: 12/4/2018						
Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description	
025956	СК	11/1/2018	24.98	037 D & D BARBER DR, LLC	D & D Barber-Customer Refund/D & D Barber-Customer Refund	
025957	СК	11/1/2018	174,95	395 FLAT FEE HOME BUILDERS	Flat Fee-Customer Refund/Flat Fee-Customer Refund	
025958	СК	11/1/2018	240.75	400 RESCO	Resco-Inventory/Resco-Inventory	
025959	СК	11/1/2018	41.61	928 PERSTON LANE & RAVEN KRUEGER	PLane-Customer Refund/PLane-Customer Refund	
025960	СК	11/1/2018	28.00	133 WISCONSIN SCTF	WI SCTF-Support/WI SCTF-Support	
025961	СК	11/1/2018	272.00	133 WISCONSIN SCTF	WI SCTF-Support/WI SCTF-Support	
025962	СК	11/1/2018	176.77	133 WISCONSIN SCTF	WI SCTF-Support/WI SCTF-Support	
025963	CK	11/1/2018	483.65	264 ODYSSEY DESIGN	Odyssey-Clothes/Odyssey-Clothes/Odyssey-Clothe s/Odyssey-Clothes/Odyssey-Clothes/Odyssey-Cloth es/Odyssey-Clothes/Odyssey-Clothes	
025964	СК	11/1/2018	205.75	146 STOUGHTON ELECTRIC UTIL.	Stoton-Elec-Bulk WW Water/Stoton-Elec-Bulk WW Water	
025965	СК	11/1/2018	2,635.20	290 MID-WEST TREE & EXCAVATION, INC	Mid west-Trenching/Mid west-Trenching/Mid west-Trenching/Mid west-Trenching/Mid west-Trenching/Mid west-Trenching/Mid west-Trenching/Mid west-Trenching/Mid west-Trenching/Mid west-Trenching	
025966	СК	11/1/2018	9,432.00	327 BORDER STATES ELECTRIC SUPPLY	Border States-Meters/Border States-Meters	
025967	CK	11/1/2018	1,768.32	448 STRAND ASSOCIATES INC.	Strand-Well 4 replacement/Strand-Well 4 replacement/Strand-Prof services/Strand-Prof services/Strand-Prof services	
025968	CK	11/2/2018	56,933.00	734 NORTH SHORE BANK FSB DEF. COMP. DEPT.	N Shore Bank-Retirement/N Shore Bank-Retirement/N Shore Bank-Retirement/N Shore Bank-Retirement/N Shore Bank-Retirement/N Shore Bank-Retirement	
025969	СК	11/7/2018	211.76	136 GREEN & GOLD LAWNCARE BLAKE LEWIS	Green Gold-Customer Refund/Green Gold-Customer Refund	
025970	СК	11/7/2018	484.17	163 LIL SMITHBACK	L Smithback-Customer Refund/L Smithback-Customer Refund	

Date:

Tuesday, December 04, 2018 09:13AM

Time: 09:13AM User: SGUNSOLUS

Stoughton Utilities

Check Register Summary - Standard

Page: 4 of 8
Report: 03699W.rpt
Company: 7430

				Period: - As of: 12/4/2018	
Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description
025971	СК	11/7/2018	580,88	261 JEFF KRAUSS	J Krauss-Customer Refund/J Krauss-Customer Refund
025972	СК	11/7/2018	314.77	665 STOUGHTON EYE CARE & EYEWEAR	Stoton Eye Care-Customer Ref/Stoton Eye Care-Customer Ref
025973	СК	11/7/2018	216,40	696 JENNIFER BRITAIN & LISA RESCH	J Britain-Customer Refund/J Britain-Customer Refund
025974	СК	11/7/2018	84.17	109 ALLEN SUEHS REV TRUST-EDWARD JONES	Allen Suehs-Customer Refund/Allen Suehs-Customer Refund
025975	СК	11/7/2018	7,269.80	327 BORDER STATES ELECTRIC SUPPLY	Border States-Inventory/Border States-Inventory/Border States-Meters/Border States-Meters
025976	СК	11/7/2018	4,604.92	448 STRAND ASSOCIATES INC.	Strand-Nordic Ridge/Strand-West Main Const/Strand-18 Utility const/Strand-18 Utility const/Strand-Nordic Ridge/Strand-West Main Const/Strand-West Main Const/Strand-Nordic Ridge/Strand-18 Utility const/Strand-18 Utility const/Strand-West Main Const+
025977	СК	11/7/2018	157.15	114 PROGRESSIVE FAMILY EYECARE BRADY HAR	FERIProgressive-Customer Refund/Progressive-Customer Refund
025978	СК	11/7/2018	511.90	143 DIGGERS HOTLINE, INC.	Diggers Hotline-Oct Locates/Diggers Hotline-Oct Locates
025979	CK	11/7/2018	1,018.50	166 INKWORKS, INC.	Inkworks-Notices/Inkworks-Notices/Inkworks-Notice s/Inkworks-Notices/Inkworks-Notices/Inkworks-Notices/Inkworks-Notices
025980	CK	11/14/2018	986.29	327 BORDER STATES ELECTRIC SUPPLY	Border States-Supplies/Border States-Supplies/Border States-Inventory/Border States-Inventory
025981	СК	11/14/2018	275,17	358 KUNZ GLOVE CO., INC.	Kunz-Gloves/Kunz-Gloves
025982	CK	11/14/2018	629.00	400 RESCO	Resco-Supplies/Resco-Supplies/Resco-Supplies/Resco-Supplies
025983	СК	11/14/2018	353.75	405 ROSENBAUM CRUSHING & EXCAV.	Rosenbaum-Dump Fees/Rosenbaum-Dump Fees
025984	СК	11/14/2018	4,293.10	496 A.C. ENGINEERING COMPANY	AC Eng-North Sub work/AC Eng-North Sub work

Tuesday, December 04, 2018 09:13AM

Date: Time: SGUNSOLUS User:

Stoughton Utilities

Check Register Summary - Standard

5 of 8 03699W.rpt 7430 Page: Report: Company:

			_	Period: - As of: 12/4/2018	
Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description
025985	СК	11/14/2018	176.77	133 WISCONSIN SCTF	WI SCTF-Nov B Support/WI SCTF-Nov B Support
025986	СК	11/14/2018	272.00	133 WISCONSIN SCTF	WI SCTF-Nov B Support/WI SCTF-Nov B Support
025987	СК	11/14/2018	28.00	133 WISCONSIN SCTF	WI SCTF-Nov B Support/WI SCTF-Nov B Support
025988	СК	11/14/2018	701.32	601 FOSDALS BAKERY LLC	F Bakery-Deposit refund/F Bakery-Deposit Refund/F Bakery-Deposit Refund/F Bakery-Deposit refund/F Bakery-Deposit refund/F Bakery-Deposit refund/F Bakery-Deposit refund/F Bakery-Deposit refund/F Bakery-Deposit refund/F Bakery-Deposit refund
025989	СК	11/14/2018	311.41	933 SARAH HENDRICKSON	S Hendrickson-Dep Refund/S Hendrickson-Dep Refund
025990	СК	11/14/2018	610.46	146 STOUGHTON ELECTRIC UTIL.	Stoton Elec-Customer refund/Stoton Elec-Customer refund
025991	СК	11/14/2018	14,253.00	290 MID-WEST TREE & EXCAVATION, INC	Midwest-Trenching/Midwest-Trenching/Midwest-Tre nching/Midwest-Trenching/Midwest-Trenching/Midw est-Trenching
025992	СК	11/14/2018	3,343.39	451 INSIGHT FS	Insight-Fuel/Insight-Fuel/Insight-Fuel/Insight-Fuel/Insight-Fuel/Insight-Fuel
025993	CK	11/14/2018	333.65	429 STOUGHTON FAMILY COUNSELING	Stoton Family-Deposit Refund/Stoton Family-Deposit Refund
025994	СК	11/14/2018	99.80	625 ALLEN SUEHS REV TRUST	A Suehs-Customer Refund/A Suehs-Customer Refund
025995	СК	11/14/2018	77.80	722 JULIE SCHADRIE	J Schadrie-Customer Refund/J Schadrie-Customer Refund
025996	СК	11/14/2018	37.49	765 JOSEPH KLEIN LOLTA TRUST ACCOUNT	J Klein-Customer Refund/J Klein-Customer Refund
025997	СК	11/14/2018	275.24	869 DANIEL MCGRANE & ANGELA OESTREICH	D Mcgrane-Deposit Refund/D Mcgrane-Deposit Refund
025998	СК	11/29/2018	89.77	444 LASHAWNDA EAST	L East-Customer Refund/L East-Customer Refund
025999	СК	11/29/2018	91.61	513 GILLETTE PROPERTIES LLC DANIEL GILLETTE	Gillette-Customer Refund/Gillette-Customer Refund

Date:

Tuesday, December 04, 2018 09:13AM SGUNSOLUS

Time: User:

Stoughton Utilities

Check Register Summary - Standard

Period: - As of: 12/4/2018

Page: Report: Company:

6 of 8 03699W.rpt 7430

Check			Amount		Description
Nbr	Type	Date	Paid	Vendor ID / Name	Sescription
026000	CK	11/29/2018	23.25	582 STEVEN ASLESON	S Asleson-Customer Refund/S Asleson-Customer Refund/S Asleson-Customer Refund/S Asleson-Customer Refund
026001	СК	11/29/2018	17.33	798 LENNA MANN	L Mann-Customer Refund/L Mann-Customer Refund
026002	СК	11/29/2018	102.39	991 BARNS & ASSOCIATES REALTY GROUP	Barns-Customer Refund/Barns-Customer Refund
026003	СК	11/29/2018	90.00	058 BOARDMAN CLARK LLP	Boardman-Pole Agreement/Boardman-Pole Agreement
026004	CK	11/29/2018	970_00	232 MIDWEST TESTING LLC	Midwest-Testing/Midwest-Testing
026005	CK	11/29/2018	3,664.50	290 MID-WEST TREE & EXCAVATION, INC	MidWest-Trenching/MidWest-Trenching/MidWest-Trenching/MidWest-Trenching/MidWest-Trenching/MidWest-Trenching/MidWest-Trenching/MidWest-Trenching/MidWest-Trenching/MidWest-Trenching
026006	СК	11/29/2018	1,049.48	831 CREAM CITY SCALE LLC	Cream City-Checial Scale Rep/Cream City-Checial Scale Rep/Cream City-Chemical Scale Rep/Cream City-Chemical Scale Rep
026007	СК	11/29/2018	5,276.29	207 L.W. ALLEN, INC.	LW Allen-Gas Flow Meter/LW Allen-Gas Flow Meter
026008	СК	11/29/2018	7,687.65	727 GLS UTILITY LLC	GLS Utiltity-Oct Locates/GLS Utiltity-Oct Locates/GLS Utiltity-Oct Locates/GLS Utiltity-Oct Locates/GLS Utiltity-Oct Locates/GLS Utiltity-Oct Locates
026009	СК	11/29/2018	28,600,60	131 CITY OF STOUGHTON	City Stoton-Nov Retirement/City Stoton-Nov Retirement/City Stoton-Nov Retirement/City Stoton-Nov Retirement/City Stoton-Nov Retirement/City Stoton-Nov Retirement
026010	СК	11/29/2018	272.00	133 WISCONSIN SCTF	WI SCTF-Nov C Support/WI SCTF-Nov C Support
026011	СК	11/29/2018	176.77	133 WISCONSIN SCTF	WI SCTF-Nov C Support/WI SCTF-Nov C Support
026012	СК	11/29/2018	28.00	133 WISCONSIN SCTF	WI SCTF-Nov C Support/WI SCTF-Nov C Support
026013	СК	11/29/2018	1,540.21	400 RESCO	Resco-Supplies/Resco-Supplies/Resco-Supplies/Resco-Supplies/Resco-Inventory/Resco-Inventory/Resco-Inventory/Resco-Inventory/Resco-Inventory/Resco-Inventory/Resco-Inventory

Date: Time: Tuesday, December 04, 2018 09:13AM

SGUNSOLUS User:

Stoughton Utilities

Check Register Summary - Standard

Period: - As of: 12/4/2018

			Period: - As of: 12/4/2018								
Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description						
026014	CK	11/29/2018	82.00	079 DONALD & KAREN CARLSEN	D Carlsen-Customer Refund/D Carlsen-Customer Refund						
026015	CK	11/29/2018	45,054.84	131 CITY OF STOUGHTON	City Stoton-Stormwater/City Stoton-Stormwater						
026016	СК	11/29/2018	16,538.45	539 DEPT OF ADMIN-WISMART VENDOR #396028867	EDept of Admin-Pub Benefits/Dept of Admin-Pub Benefits						
026017	СК	11/29/2018	72.00	584 VINING SPARKS IBG, L.P.	Vining Sparks-Safekeeping/Vining Sparks-Safekeeping						
026018	СК	11/29/2018	264.98	711 STUDIO A HAIR DESIGN AMY CHAZAN	Studio-Customer Refund/Studio-Customer Refund						
026019	СК	11/29/2018	4,635,00	597 N-DIMENSION SOLUTIONS	N Dimension-Maint.						
026020	СК	11/30/2018	53,834.92	131 CITY OF STOUGHTON	City Stoton-Jf salary/City Stoton-Drug Tests/City Stoton-Drug Tests/City Stoton-Jf salary/City Stoton-Jf salary/City Stoton-Drug Tests/City Stoton-Drug Tests/City Stoton-Jf salary/City Stoton-Drug Tests/City Stoton-Drug Tests/City Stoton-Jf salary+						
101733	VC	11/6/2018	-17,486.46	157 FORSTER ELEC. ENG.,INC.	Forster-Retainage/Forster-Retainage						
101741	СК	11/1/2018	300.00	404 JESSE MOWERY	J Mowery-School Exp/J Mowery-School Exp/J Mowery-School Exp/J Mowery-School Exp						
101742	СК	11/1/2018	2,070.00	463 GREAT-WEST	Great West-Nov A Def Comp/Great West-Nov A Def Comp						
101743	CK	11/1/2018	152.00	545 AARON MATTINGLY	A Mattingly-School Exp/A Mattingly-School Exp/A Mattingly-School Exp/A Mattingly-School Exp						
101744	СК	11/1/2018	5,436.48	603 SEERA-WIPFLI LLP	Seera-CTC Funds/Seera-CTC Funds						
101745	СК	11/1/2018	900.00	731 NORTH SHORE BANK FSB-DEFERRED COMP.	N Shore BK-Oct B Def Comp/N Shore BK-Oct B Def Comp/N Shore Bk-Nov A Def Comp/N Shore						
101746	VC	11/6/2018	17,486.46	157 FORSTER ELEC. ENG.,INC.	Forster-Retainage/Forster-Retainage						
101747	СК	11/15/2018	2,510.00	157 FORSTER ELEC. ENG.,INC.	Forster-Tech Assist/Forster-Tech Assist/Forster-Scada/Forster-Scada						
101748	СК	11/15/2018	3,445.00	463 GREAT-WEST	Great West-Nov B Def Comp/Great West-Nov B Def Comp						
101749	СК	11/15/2018	152.00	525 TYLER HARDING	T Harding-School Exp/T Harding-School Exp/T Harding-School Exp/T Harding-School Exp						

Page: Report: 7 of 8 03699W.rpt

Company: 7430

Date:

Tuesday, December 04, 2018 09:13AM

Time: SGUNSOLUS User:

Stoughton Utilities

Check Register Summary - Standard

Period: - As of: 12/4/2018

Page: Report:

8 of 8 03699W.rpt 7430 Company:

Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description
101750	VC	11/29/2018	0.00	597 N-DIMENSION SOLUTIONS	N Dimension-Maint.
101751	CK	11/15/2018	5,328.29	603 SEERA-WIPFLI LLP	Seera-CTC Funds/Seera-CTC Funds
101752	СК	11/15/2018	450.00	731 NORTH SHORE BANK FSB-DEFERRED COMP,	N Shore Bk-Nov B Def Comp/N Shore Bk-Nov B Def Comp
101753	СК	11/30/2018	789.00	091 RALPH & ROSE RAMOS	R Ramos-Customer Refund/R Ramos-Customer Refund
101754	СК	11/30/2018	289.17	181 BRIAN HOOPS	B Hoops-Exams/B Hoops-Exams/B Hoops-Exams/B Hoops-Exams
101755	СК	11/30/2018	44.00	310 HANSON PEST MANAGEMENT	Hanson Pest-Maint/Hanson Pest-Maint/Hanson Pest-Maint/Hanson Pest-Maint/Hanson Pest-Maint/Hanson Pest-Maint
101756	СК	11/30/2018	3,445.00	463 GREAT-WEST	Great West-Nov C Def Comp/Great West-Nov C Def Comp
101757	CK	11/30/2018	450.00	731 NORTH SHORE BANK FSB-DEFERRED COMP	N Shore Bk-Nov C Def Comp/N Shore Bk-Nov C Def Comp
		Company Total	1,365,107.80		•

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	Account	Sub	Vendor ID	Merchant	Amount	Description	Post Date	Emp ID	Projec
Import ID: 0	009010	Imp	ort # : 00000000	90					
7460	833	000000	148	FASTENAL COMPANY01	-32.17	DAFT OVERFLOW WEIR PARTS	10/05/2018	8200	
7460	850	000000	894	GRAND GENEVA RESORT & SP	-25.34	WWOA CONFERENCE	10/22/2018	8200	
7460	833	000000	390	BADGER WATER	33.80	LAB WATER	10/01/2018	8300	
7460	107.14	000000	937	SPEE-DEE DELIVERY	14.54	PARADISE POND	10/01/2018	8300	180303XX -
7460	107.14	000000	974	NORTHERN LAKE SERVICE, IN	843.00	PARADISE POND TESTING	10/01/2018	8300	180303XX -
7460	833	000000	974	NORTHERN LAKE SERVICE, IN	32.00	OUTSIDE LAB TESTING	10/01/2018	8300	
7460	833	000000	974	NORTHERN LAKE SERVICE, IN	32.00	OUTSIDE LAB TESTING	10/05/2018	8300	
7460	833	000000	830	NCL OF WISCONSIN INC	683.78	LAB SUPPLIES	10/10/2018	8300	
7460	107.14	000000	974	NORTHERN LAKE SERVICE, IN	281.00	PARADISE POND TESTING	10/15/2018	8300	180303XX -
7460	833	000000	937	SPEE-DEE DELIVERY	14.57	LAB WATER SHIPPING	10/15/2018	8300	
7460	833	000000	164	THE UPS STORE 3617	122.13	TOXICITY SAMPLE SHIPPING	10/16/2018	8300	
7460	833	000000	164	THE UPS STORE 3617	35.76	TOXICITY SAMPLE SHIPPING	10/18/2018	8300	
7460	833	000000	830	NCL OF WISCONSIN INC	135.70	LAB SUPPLIES	10/18/2018	8300	
7460	833	000000	974	NORTHERN LAKE SERVICE, IN	32.00	LAB SUPPLIES	10/19/2018	8300	
7430	903	000000	419	PAYFLOW/PAYPAL	36.82	CC Processing - Desktop and Recurring	10/03/2018	5250	
7450	903	000000	419	PAYFLOW/PAYPAL	13.25	CC Processing - Desktop and Recurring	10/03/2018	5250	
460	840	000000	419	PAYFLOW/PAYPAL	17.67	CC Processing - Desktop and Recurring	10/03/2018	5250	
430	233	001099	419	PAYFLOW/PAYPAL	5.91	CC Processing - Desktop and Recurring	10/03/2018	5250	
430	921	000000	836	MSFT E04006NE0L	31.90	LICENSING - MS LYNC ONLINE	10/03/2018	5250	
7450	921	000000	836	MSFT E04006NE0L	11.60	LICENSING - MS LYNC ONLINE	10/03/2018	5250	
7460	851	000000	836	MSFT E04006NE0L	14.50	LICENSING - MS LYNC ONLINE	10/03/2018	5250	
7430	903	000000	419	PAYFLOW/PAYPAL	60.67	CC processing - Online MyAccount	10/03/2018	5250	
7450	903	000000	419	PAYFLOW/PAYPAL	21.84	CC processing - Online MyAccount	10/03/2018	5250	
7460	840	000000	419	PAYFLOW/PAYPAL	29.12	CC processing - Online MyAccount	10/03/2018	5250	
430	233	001099	419	PAYFLOW/PAYPAL	9.72	CC processing - Online MyAccount	10/03/2018	5250	
7430	921	000000	671	DNH GODADDY.COM	460.25	DOMAIN REGISTRATIONS - 9 YEARS .NET .ORG, 5YEAR .COM	10/11/2018	5250	
7450	921	000000	671	DNH GODADDY.COM	165.69	DOMAIN REGISTRATIONS - 9 YEARS .NET .ORG, 5YEAR .COM	10/11/2018	5250	
7460	851	000000	671	DNH GODADDY.COM	220.92	DOMAIN REGISTRATIONS - 9 YEARS .NET .ORG, 5YEAR .COM	10/11/2018	5250	
7430	233	001099	671	DNH GODADDY.COM	73.64	DOMAIN REGISTRATIONS - 9 YEARS .NET .ORG, 5YEAR .COM	10/11/2018	5250	
7430	920	000000	601	SQ FOSDAL HOME BAK	4.95	Meeting expense - UC meeting	10/11/2018	5250	
7450	920	000000	601	SQ FOSDAL HOME BAK	1.80	Meeting expense - UC meeting	10/16/2018	5250	
7450 7460	920 850	000000	601	SQ FOSDAL HOME BAK	2.25		10/16/2018	5250	
7430	588	000000	108	ASLESON'S TRUE VALUE HDW	18.98	Meeting expense - UC meeting BATTERIES AND CHARGER	10/10/2018	5200	
7430 7430	933	000000	626	663 STOUGHTON BUMPER TO B	106.99	BATTERIES AND CHARGER BATTERY FOR ELECTRIC TRUCK	10/30/2018	5200	
450	933 678			FASTENAL COMPANY01		BATTERIES FOR BARRICADES		8400	
	678	000000	148 108		61.81 20.97		10/10/2018 10/10/2018	8400	
7450				ASLESON'S TRUE VALUE HDW		BATTERIES FOR BARRICADES			
7450	642	000000	571	USA BLUE BOOK	62.27	WATER LAB SUPPLIES	10/16/2018	8400	
7450	633	000000	108	ASLESON'S TRUE VALUE HDW	2.49	HOSE CLAMP	10/18/2018	8400	
450	642	000000	571	USA BLUE BOOK	250.20	LAB SUPPLIES	10/23/2018	8400	
7430	933	000000	626	663 STOUGHTON BUMPER TO B	76.95	ELECTRIC TRUCK REPAIRS	10/03/2018	8700	
7450	107.14 678	000000	108 108	ASLESON'S TRUE VALUE HDW ASLESON'S TRUE VALUE HDW	9.99 3.48	1 INCH PIPE HOSE	10/05/2018 10/05/2018	8700 8700	180916XX -

Time: 08:58AM
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Company	Account	Sub	Vendor ID	Merchant	Amount	Description	Post Date	Emp ID	Projec
7430	932	000000	108	ASLESON'S TRUE VALUE HDW	4.60	ADMIN BLDG BREAK ROOM REPAIRS	10/15/2018	8700	
7430	933	000000	148	FASTENAL COMPANY01	37.43	ELECTRIC TRUCK REPAIRS	10/18/2018	8700	-
7430	107.14	000000	436	STOUGHTON LUMBER CO	16.64	NORDIC RIDGE III SUPPLIES	10/29/2018	8700	180092XX - 1
7450	641	000000	309	HAWKINS INC	1,850.80	CHEMICALS	10/04/2018	7400	-
7450	642	000000	974	NORTHERN LAKE SERVICE, IN	630.00	UCMR4 SAMPLES	10/04/2018	7400	-
7450	642	000000	675	WI STATE HYGIENE LAB	25.00	FLOURIDE TESTING	10/05/2018	7400	-
7450	932	000000	108	ASLESON'S TRUE VALUE HDW	6.49	PLUMB LINE	10/15/2018	7400	-
7450	642	000000	974	NORTHERN LAKE SERVICE, IN	4,014.00	LAB ANALYSIS	10/18/2018	7400	-
7450	107.14	000000	354	HYDRO DESIGNS	693.57	CROSS CONNECTIONS	10/31/2018	7400	180901XX -
7460	833	000000	148	FASTENAL COMPANY01	13.25	PARTS FOR DAFT REPAIR	10/09/2018	8710	-
7460	832	000000	626	663 STOUGHTON BUMPER TO B	45.98	BELTS FOR PUMPS	10/16/2018	8710	-
7460	833	000000	894	KWIK TRIP 96700009670	5.97	ICE FOR LAB SAMPLES	10/17/2018	8710	-
7460	833	000000	626	663 STOUGHTON BUMPER TO B	34.88	BELTS FOR DIGESTER EXHAUST FAN	10/19/2018	8710	-
7460	833	000000	164	THE UPS STORE 3617	139.04	LAB SAMPLE SHIPPING	10/22/2018	8710	-
7460	833	000000	571	USA BLUE BOOK	465.50	FILTERS FOR BLOWERS	10/22/2018	8710	-
7460	833	000000	894	KWIK TRIP 96700009670	1.99	ICE FOR LAB SAMPLES	10/22/2018	8710	-
7460	833	000000	795	EMS INDUSTRIAL, INC.	61.04	MOTOR BEARING FOR DIGESTER	10/03/2018	8200	-
7460	833	000000	148	FASTENAL COMPANY01	43.54	DAFT OVERFLOW WEIR PARTS	10/04/2018	8200	-
7460	834	000000	108	ASLESON'S TRUE VALUE HDW	20.29	PARTS FOR POLYMER LINE	10/04/2018	8200	-
7460	834	000000	169	JEFFERSON FIRE & SAFETY	254.65	FIRE EXTINGUISHER MAINT	10/04/2018	8200	-
7460	834	000000	148	FASTENAL COMPANY01	96.85	TOILET PAPER	10/04/2018	8200	-
7460	833	000000	148	FASTENAL COMPANY01	112.18	DAFT OVERFLOW WEIR PARTS	10/05/2018	8200	-
7460	832	000000	207	LW ALLEN	1,627.00	VENNEVOL CONTROL PANEL REPAIR	10/08/2018	8200	-
7460	831	000000	674	NORTHERN SEWER EQUIP	57.40	WHEEL FOR TELEVISING CAMERA	10/11/2018	8200	-
7460	854	000000	422	AMZN MKTP US MT8V42U81	65.96	RAIN GEAR FOR EMPLOYEES	10/15/2018	8200	-
7460	850	000000	894	GRAND GENEVA RESORT & SP	161.67	WWOA CONFERENCE	10/22/2018	8200	-
7460	850	000000	894	GRAND GENEVA RESORT & SP	136.33	WWOA CONFERENCE	10/22/2018	8200	-
7460	831	000000	108	ASLESON'S TRUE VALUE HDW	14.54	PARTS FOR EW LIFT STATION	10/23/2018	8200	-
7460	831	000000	550	FIRST SUPPLY WFPG MAD	279.20	PARTS FOR EW LIFT STATION	10/23/2018	8200	-
7460	831	000000	083	IN ENVIROTECH EQUIPMENT	733.89	JET VAC PARTS	10/23/2018	8200	-
7460	833	000000	108	ASLESON'S TRUE VALUE HDW	20.99	LIGHT BALLAST	10/25/2018	8200	-
7460	833	000000	436	STOUGHTON LUMBER CO	3.59	LIGHT BALLAST	10/26/2018	8200	-
7460	833	000000	295	PRECISION DRIVE AND CONTR	362.86	PRIMARY 2 DRIVE WIRE REPAIR	10/26/2018	8200	-
7460	833	000000	394	RADWELL INTERNATIONAL	216.30	DAFT LEVEL CONTROLLER	10/29/2018	8200	-
7460	834	000000	436	STOUGHTON LUMBER CO	44.00	CEILING TILES FOR OFFICE	10/29/2018	8200	-
7430	903	000000	954	VOICESHOT LLC	125.00	Automated outbound collections calls	10/25/2018	3670	-
7450	903	000000	954	VOICESHOT LLC	45.00	Automated outbound collections calls	10/25/2018	3670	-
7460	840	000000	954	VOICESHOT LLC	60.00	Automated outbound collections calls	10/25/2018	3670	-
7430	233	001099	954	VOICESHOT LLC	20.00	Automated outbound collections calls	10/25/2018	3670	-
7450	642	000000	824	UPS 1ZG194WT0319965168	9.43	SHIPPING OF WATER SAMPLES FOR TESTING	10/01/2018	3680	-
7430	921	000000	889	PITNEY BOWES PI	56.51	Postage machine supplies	10/03/2018	3680	-
7450	921	000000	889	PITNEY BOWES PI	20.34	Postage machine supplies	10/03/2018	3680	-
7460	851	000000	889	PITNEY BOWES PI	27.12	Postage machine supplies	10/03/2018	3680	-
7430	233	001099	889	PITNEY BOWES PI	9.05	Postage machine supplies	10/03/2018	3680	-

Time: 08:58AM
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Company	Account	Sub	Vendor ID	Merchant	Amount	Description	Post Date	Emp ID	Projec
450	642	000000	824	UPS 1ZG194WT0314891176	9.73	SHIPPING OF WATER SAMPLES FOR TESTING	10/04/2018	3680	-
430	921	000000	352	STAPLS7205620365000001	100.47	GENERAL OFFICE SUPPLIES	10/05/2018	3680	-
450	921	000000	352	STAPLS7205620365000001	36.16	GENERAL OFFICE SUPPLIES	10/05/2018	3680	
460	851	000000	352	STAPLS7205620365000001	48.22	GENERAL OFFICE SUPPLIES	10/05/2018	3680	
430	233	001099	352	STAPLS7205620365000001	16.09	GENERAL OFFICE SUPPLIES	10/05/2018	3680	
430	921	000000	352	STAPLS7205620961000001	88.99	GENERAL KITCHEN SUPPLIES	10/05/2018	3680	
450	921	000000	352	STAPLS7205620961000001	32.36	GENERAL KITCHEN SUPPLIES	10/05/2018	3680	
460	851	000000	352	STAPLS7205620961000001	40.46	GENERAL KITCHEN SUPPLIES	10/05/2018	3680	
430	920	000000	601	SQ FOSDAL HOME BAK	14.30	Employee recognition expense	10/08/2018	3680	
450	920	000000	601	SQ FOSDAL HOME BAK	5.20	Employee recognition expense	10/08/2018	3680	
460	850	000000	601	SQ FOSDAL HOME BAK	6.50	Employee recognition expense	10/08/2018	3680	
430	920	000000	507	WAL-MART #1176	3.77	Employee recognition expense	10/09/2018	3680	
450	642	000000	824	UPS 1ZG194WT0316544387	9.73	SHIPPING OF WATER SAMPLES FOR TESTING	10/11/2018	3680	
430	143	000000	601	SQ FOSDAL HOME BAK	20.10	Public power week reception expense - WPPI reimbursed	10/11/2018	3680	
450	642	000000	824	UPS 1ZG194WT0308508799	9.73	SHIPPING OF WATER SAMPLES FOR TESTING	10/12/2018	3680	
430	921	000000	352	STAPLS7206208439000001	19.47	GENERAL KITCHEN SUPPLIES	10/15/2018	3680	
450	921	000000	352	STAPLS7206208439000001	7.08	GENERAL KITCHEN SUPPLIES	10/15/2018	3680	
460	851	000000	352	STAPLS7206208439000001	8.86	GENERAL KITCHEN SUPPLIES	10/15/2018	3680	
130	903	000000	824	USPS PO 5679700726	5.00	Postage - General mailings	10/16/2018	3680	
150	903	000000	824	USPS PO 5679700726	1.80	Postage - General mailings	10/16/2018	3680	
460	840	000000	824	USPS PO 5679700726	2.40	Postage - General mailings	10/16/2018	3680	
430	233	001099	824	USPS PO 5679700726	0.80	Postage - General mailings	10/16/2018	3680	
450	642	000000	824	UPS 1ZG194WT0314848400	9.73	SHIPPING OF WATER SAMPLES FOR TESTING	10/18/2018	3680	
130	921	000000	352	STAPLS7206575654000001	101.54	GENERAL OFFICE SUPPLIES	10/22/2018	3680	
450	921	000000	352	STAPLS7206575654000001	36.55	GENERAL OFFICE SUPPLIES	10/22/2018	3680	
160	851	000000	352	STAPLS7206575654000001	48.74	GENERAL OFFICE SUPPLIES	10/22/2018	3680	
430	233	001099	352	STAPLS7206575654000001	16.26	GENERAL OFFICE SUPPLIES	10/22/2018	3680	
430	920	000000	445	TLF STOUGHTON FLORAL	35.92	Funeral memorial - Former employee	10/22/2018	3680	
150	920	000000	445	TLF STOUGHTON FLORAL	13.06	Funeral memorial - Former employee	10/22/2018	3680	
160	850	000000	445	TLF STOUGHTON FLORAL	16.33	Funeral memorial - Former employee	10/22/2018	3680	
130	921	000000	352	STAPLS7207086024000001	71.67	GENERAL OFFICE SUPPLIES	10/29/2018	3680	
150	921	000000	352	STAPLS7207086024000001	25.80	GENERAL OFFICE SUPPLIES	10/29/2018	3680	
460	851	000000	352	STAPLS7207086024000001	34.40	GENERAL OFFICE SUPPLIES	10/29/2018	3680	
130	233	001099	352	STAPLS7207086024000001	11.47	GENERAL OFFICE SUPPLIES	10/29/2018	3680	
430	920	000000	601	SQ FOSDAL HOME BAK	36.00	SAFETY MEETING DONUTS	10/04/2018	6960	
130	107.14	000000	994	TRACTOR SUPPLY #2236	31.24	HWY 138 MAINT	10/10/2018	6960	181008UA -
130	107.14	000000	148	FASTENAL COMPANY01	24.77	PARTS FOR HWY 138	10/11/2018	6960	181008UA -
130	593	000000	894	HAMPTON INN EAU CLAIRE	252.55	SCHOOL HOTEL	10/22/2018	5296	
430	594	000000	894	HAMPTON INN EAU CLAIRE	252.55	SCHOOL HOTEL	10/22/2018	5296	
130	933	000000	894	KWIK TRIP 39000003905	42.00	GAS FOR SCHOOL	10/22/2018	5296	
130	586	000000	894	MEGGER AVO TRAINING INST	881.45	ELECTRIC METER TEST BOARD REPAIRS	10/15/2018	5275	
130	934	000000	317	CENEX D M SERV07083686	32.00	PROPANE FOR FORKLIFT	10/30/2018	5275	
150	631	000000	994	REVERE ELECTRIC SUPPLY CO	28.64	MECHANICAL CONNECTORS	10/08/2018	6980	
160	833	000000	108	ASLESON'S TRUE VALUE HDW	10.48	PVC FITTING FOR BAZOOKA	10/16/2018	8740	

Time: 08:58AM
User: SGUNSOLUS

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7430	933	000000	894	KWIK TRIP 3900003905	43.00	FUEL FOR SCHOOL	10/08/2018	6940	-
7430	593	000000	894	HAMPTON INN - EAU CLAI	222.50	HOTEL FOR SCHOOL	10/08/2018	6940	-
7430	594	000000	894	HAMPTON INN - EAU CLAI	222.50	HOTEL FOR SCHOOL	10/08/2018	6940	-
7430	932	000000	148	FASTENAL COMPANY01	79.68	SHOP SUPPLIES	10/02/2018	6970	-
7430	594	000000	115	HOMEDEPOT.COM	68.88	UG TOOLS	10/05/2018	6970	-
7430	926	000000	809	CINTAS 446	186.26	UNIFORM CLEANING	10/01/2018	4000	-
7450	926	000000	809	CINTAS 446	35.55	UNIFORM CLEANING	10/01/2018	4000	-
7460	854	000000	809	CINTAS 446	26.31	UNIFORM CLEANING	10/01/2018	4000	-
7430	934	000000	269	UTILITY SALES & SERV	7,683.89	TRUCK 16 REPAIRS	10/04/2018	4000	-
7430	933	000000	938	STOUGHTON COLLISION CE	1,412.49	TRAVERSE DAMAGE	10/05/2018	4000	-
7450	933	000000	938	STOUGHTON COLLISION CE	513.63	TRAVERSE DAMAGE	10/05/2018	4000	-
7460	828	000000	938	STOUGHTON COLLISION CE	642.05	TRAVERSE DAMAGE	10/05/2018	4000	-
7430	926	000000	809	CINTAS 446	186.26	UNIFORM CLEANING	10/08/2018	4000	-
7450	926	000000	809	CINTAS 446	35.55	UNIFORM CLEANING	10/08/2018	4000	-
7460	854	000000	809	CINTAS 446	26.31	UNIFORM CLEANING	10/08/2018	4000	-
7430	934	000000	994	CAPITAL EQUIPMENT	69.00	FORK LIFT MAINT	10/11/2018	4000	-
7430	926	000000	809	CINTAS 446	186.26	UNIFORM CLEANING	10/15/2018	4000	-
7450	926	000000	809	CINTAS 446	35.55	UNIFORM CLEANING	10/15/2018	4000	-
7460	854	000000	809	CINTAS 446	26.31	UNIFORM CLEANING	10/15/2018	4000	-
7430	920	000000	089	MUNICIPAL ELECTRIC UTILIT	175.00	MEUW TRAINING	10/17/2018	4000	-
7430	932	000000	322	IN SUNDANCE BIOCLEAN, IN	280.50	JANITORIAL	10/18/2018	4000	-
7450	932	000000	322	IN SUNDANCE BIOCLEAN, IN	102.00	JANITORIAL	10/18/2018	4000	-
7460	834	000000	322	IN SUNDANCE BIOCLEAN, IN	127.50	JANITORIAL	10/18/2018	4000	-
7430	143	000000	652	MENARDS E-COMMERCE	2,377.24	HOLIDAY LIGHTING - WPPI REIMBURSEABLE	10/22/2018	4000	-
7430	926	000000	809	CINTAS 446	186.26	UNIFORM CLEANING	10/22/2018	4000	-
7450	926	000000	809	CINTAS 446	35.55	UNIFORM CLEANING	10/22/2018	4000	-
7460	854	000000	809	CINTAS 446	26.31	UNIFORM CLEANING	10/22/2018	4000	-
7430	926	000000	809	CINTAS 446	186.26	UNIFORM CLEANING	10/29/2018	4000	-
7450	926	000000	809	CINTAS 446	35.55	UNIFORM CLEANING	10/29/2018	4000	-
7460	854	000000	809	CINTAS 446	26.31	UNIFORM CLEANING	10/29/2018	4000	-
7430	588	000000	422	AMZN MKTP US MT3GD1530	38.00	LATEX GLOVES	10/01/2018	4100	-
7430	107.14	000000	327	BORDER STATES ELECTRIC	1,890.00	CT PROJECT AT NORTH SUB	10/02/2018	4100	160200XX - 1
7450	642	000000	422	AMAZON.COM MT0I84BG0	20.04	IMPELLER KIT	10/03/2018	4100	-
7430	932	000000	134	CRESCENT ELECTRIC 087	18.00	SHIPPING FOR HALLWAY LIGHTS	10/03/2018	4100	-
7430	588	000000	422	AMAZON.COM MT9QU08X0	6.47	FIRST AID SUPPLIES	10/04/2018	4100	-
7430	932	000000	169	JEFFERSON FIRE & SAFETY	245.71	ANNUAL FIRE MAINT	10/04/2018	4100	-
7450	932	000000	169	JEFFERSON FIRE & SAFETY	89.35	ANNUAL FIRE MAINT	10/04/2018	4100	-
7460	834	000000	169	JEFFERSON FIRE & SAFETY	111.69	ANNUAL FIRE MAINT	10/04/2018	4100	-
7430	926	000000	422	AMZN MKTP US MT6B819G2	42.98	SAFETY GLASSES	10/09/2018	4100	-
7430	588	000000	422	AMZN MKTP US MT3IL6UN2	128.98	WEST SUB MOTION CAMERA	10/10/2018	4100	-
7430	593	000000	327	BORDER STATES ELECTRIC	37.98	DIE CRIMPING TOOL	10/10/2018	4100	-
7430	594	000000	327	BORDER STATES ELECTRIC	37.98	DIE CRIMPING TOOL	10/10/2018	4100	-
7430	926	000000	422	AMAZON.COM MT6MP6721	41.57	SAFETY GLASSES	10/10/2018	4100	-
7430	593	000000	631	WESSPUR TREE EQUIP. INC	110.50	LINE DIVISION SUPPLIES	10/11/2018	4100	_

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User: SGUNSOLUS

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Stoughton Utilities Posting Preview Report

Company	Account	Sub	Vendor ID	Merchant	Amount	Description	Post Date	Emp ID	Projec
7430	594	000000	631	WESSPUR TREE EQUIP. INC	110.50	LINE DIVISION SUPPLIES	10/11/2018	4100	-
7430	593	000000	327	BORDER STATES ELECTRIC	1,363.79	TELESCOPIC HOT STICK	10/17/2018	4100	-
7430	232	001099	134	CRESCENT ELECTRIC 087	348.80	ELECTRIC INVENTORY	10/17/2018	4100	=
7430	932	000000	134	CRESCENT ELECTRIC 087	20.31	BREAKER PANEL COVERS	10/17/2018	4100	-
7430	593	000000	327	BORDER STATES ELECTRIC	203.14	LINE DIVISION TOOLS	10/17/2018	4100	-
7430	594	000000	327	BORDER STATES ELECTRIC	203.14	LINE DIVISION TOOLS	10/17/2018	4100	-
7430	932	000000	331	MONONA PLUMBING	96.25	FIRE SPRINKLER MAINT	10/18/2018	4100	-
7450	932	000000	331	MONONA PLUMBING	35.00	FIRE SPRINKLER MAINT	10/18/2018	4100	-
7460	834	000000	331	MONONA PLUMBING	43.75	FIRE SPRINKLER MAINT	10/18/2018	4100	-
7430	933	000000	360	DAKOTA RIGGERS & TOOL SU	732.73	TOW ROPE FOR TRUCKS	10/22/2018	4100	-
7430	593	000000	134	CRESCENT ELECTRIC 087	255.19	RIGID CONDUIT	10/26/2018	4100	-
7460	827	000000	134	CRESCENT ELECTRIC 087	6.49	CONDUIT	10/26/2018	4100	-
7450	232	001099	550	FIRST SUPPLY WFPG MAD	791.00	WATER INVENTORY	10/30/2018	4100	-
7450	232	001099	550	FIRST SUPPLY WFPG MAD	390.00	WATER INVENTORY	10/31/2018	4100	-
7430	232	001099	355	STUART C IRBY	6,355.92	ELECTRIC INVENTORY	10/31/2018	4100	-

Total: 48,205.36

Friday, January 04, 2019 11:22AM Date:

Time: SGUNSOLUS User:

Stoughton Utilities

Check Register Summary - Standard

Period: - As of: 1/4/2019

1 of 6 Page: 03699W.rpt Report: Company: 7430

Charle			Amazint	Period: - AS 01: 1/4/2019	
Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description
Company:	7430)			
001723	EP	12/7/2018	18,492.76	516 WELLS FARGO BANK	VO for check batch: 308721
001724	HC	12/7/2018	812,985.45	009 WPPI	WPPI-Renewable Energy/WPPI-Buy Back Solar Credit/WPPI-Shared Savingst/WPPI-Large Power/WPPI-Support Services/WPPI-Support Services/WPPI-Support Services
001725	HC	12/30/2018	2,225.70	001 Delta Dental - Ach	Delta Dental - Dec Ach/Delta Dental - Dec Ach/Delta Dental - Dec Ach
001726	HC	12/30/2018	724.19	004 Us Cellular - Ach	Us Cellular - Dec Ach/Us Cellular - Dec Ach/Us Cellular - Dec Ach/Us Cellular - Dec Ach
001727	НС	12/30/2018	418.72	547 Charter Communications-Ach	Charter Comm-Dec Ach/Charter Comm-Dec Ach/Charter Comm-Dec Ach/Charter Comm-Dec Ach
001728	НС	12/30/2018	168.15	856 GORDON FLESCH COMPANY, INC.	Gordon Flesch-Dec Ach/Gordon Flesch-Dec Ach/Gordon Flesch-Dec Ach/Gordon Flesch-Dec Ach
001729	НС	12/30/2018	456.15	007 TDS Metrocom - Ach	TDS Metrocom - Dec Ach/TDS Metrocom - Dec Ach/TDS Metrocom - Dec Ach/TDS Metrocom - Dec Ach
001730	HC	12/30/2018	30.52	421 FIRST DATA CHARGES	First Data-Dec Ach/First Data-Dec Ach/First Data-Dec Ach/First Data-Dec Ach
001731	HC	12/30/2018	1,390.85	003 Alliant Energy - Ach	Alliant Energy - Dec Ach/Alliant Energy - Dec Ach/Alliant Energy - Dec Ach/Alliant Energy - Dec Ach/Alliant Energy - Dec Ach/Alliant Energy - Dec Ach/Alliant Energy - Dec Ach
001732	HC	12/30/2018	136.15	952 AT&T	AT&T - Dec Ach/AT&T - Dec Ach
001733	НС	12/30/2018	769.30	002 Employee Benefits Corp - Ach	EBC - Dec Ach/EBC - Dec Ach/EBC - Dec Ach/EBC - Dec Ach
001734	HC	12/30/2018	3,411.98	008 Payroll State Taxes - Ach	State Taxes - Dec Ach
001735	НС	12/30/2018	17,717.33	025 Payroll Federal Taxes- Ach	Federal Taxes - Dec Ach/Federal Taxes - Dec Ach/Federal Taxes - Dec Ach/Federal Taxes - Dec Ach

Date: Friday, January 04, 2019

Time: 11:22AM User: SGUNSOLUS

Stoughton Utilities

Check Register Summary - Standard

 Page:
 2 of 6

 Report:
 03699W.rpt

 Company:
 7430

				Period: - As of: 1/4/2019	
Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description
001736	НС	12/30/2018	15,855.78	010 WI Dept. of Revenue Taxpayment-Ach	Dept of Rev- Dec Ach/Dept of Rev- Dec Ach
001737	НС	12/30/2018	7,943.25	020 Wells Fargo Bank-Ach	Client Analysis-Dec Ach/Client Analysis-Dec Ach/Client Analysis-Dec Ach/Client Analysis-Dec Ach
026021	СК	12/4/2018	10,171.53	042 PRO ELECTRIC INC.	Pro Electric-Retainage/Pro Electric-Retainage
026022	СК	12/4/2018	867.95	239 RYAN SHORE	R Shore-Const Refund
026023	CK	12/4/2018	640.66	246 CASEY POSTEL	C Postel-Const Refund
026024	CK	12/4/2018	180.11	269 UTILITY SALES AND SERVICE	Utiltiy Sales-Truck parts
026025	CK	12/4/2018	890.94	276 PRO ELECTRIC, INC.	Pro Electric-Retainage
026026	CK	12/4/2018	17.19	454 PATRICK LALLY	P Lally-cons Ref
026027	CK	12/4/2018	98.54	146 STOUGHTON ELECTRIC UTIL.	Stoton Elec-petty cash/Stoton Elec-petty cash/Stoton Elec-petty cash/Stoton Elec-petty cash
026028	CK	12/4/2018	2,725.00	209 OPEN SYSTEMS INTERNATIONAL, INC.	Open Systems-Training
026029	CK	12/4/2018	3,435.00	290 MID-WEST TREE & EXCAVATION, INC	Midwest-Trenching
026030	CK	12/4/2018	66.61	327 BORDER STATES ELECTRIC SUPPLY	Border States-Supplies
026031	СК	12/4/2018	1,607.23	400 RESCO	Resco-Inventory/Resco-Inventory/Resco-Inventory/Resco-Supplies
026032	СК	12/4/2018	2,500.00	505 HJ PERTZBORN PLUMBING & FIRE PROT. CORP.	HJ Pertzborn-Replace Wa Svc
026033	CK	12/4/2018	1,380.00	084 HARVEST FARMS, LLC	Harvest Farms-Emb Credits
026034	CK	12/4/2018	427.35	143 DIGGERS HOTLINE, INC.	Diggers Hotline-Nov Locates
026035	CK	12/4/2018	149.13	389 ROBIN MCGUIRE	R Mcguire-Customer Refund
026036	CK	12/4/2018	1,013.10	522 KIMBERLY MCGUIRE	K Mcguire-Customer Refund
026037	CK	12/4/2018	608.90	550 FIRST SUPPLY LLC MADISON	First Supply-Fountain
026038	СК	12/4/2018	37.95	103 RITASUE LINDBERG-EMILY ROGGE	R Lindberg-Customer Ref

Date: Friday, January 04, 2019

Time: 11:22AM User: SGUNSOLUS

Stoughton Utilities

Check Register Summary - Standard

Page: 3 of 6 Report: 03699W.rpt Company: 7430

Period: - As of: 1/4/2019 Check Amount Description Paid Vendor ID / Name Nbr Type Date 026039 12/4/2018 512.00 Inkworks-CTC funded CK 166 INKWORKS, INC. 026040 12/4/2018 16,226.61 448 STRAND ASSOCIATES INC. Strand-Well 4 rep/Strand-ww extras/Strand-nordic ridge/Strand-19 Const/Strand-18 const/Strand-18 const/Strand-19 Const/Strand-nordic ridge 026041 CK 12/4/2018 3,736.00 729 SHC SUGAR HILL CONSULTING, LLC SHC Sugar Hill-Scada Wk 026042 12/4/2018 24.08 737 MOLLY & NORMAN QUERAM M Queram-Customer Ref 026043 CK 12/12/2018 35.69 305 THE GROUNDS GUYS OF MADISON The Ground-Customer Refund 026044 12/12/2018 69.07 A Garvin-Customer Refund CK 383 ANN GARVIN 026045 12/12/2018 54.68 559 RICHARD BREYMAN R Breyman-Customer Refund 026046 12/12/2018 84.76 M Lottes-Customer Refund CK **562 MARLA LOTTES** 233.38 026047 CK 12/12/2018 **577 THERESA LEIGHTON** T Leighton-Customer Refund 026048 CK 12/12/2018 7.30 829 MARK PLUMLEY & KAYLA LOWREY M Plumley-Customer Refund 026049 12/12/2018 28.00 133 WISCONSIN SCTF WI SCTF-Dec A Support CK 026050 CK 12/12/2018 272.00 133 WISCONSIN SCTF WI SCTF-Dec A Support 176.77 026051 CK 12/12/2018 133 WISCONSIN SCTF WI SCTF-Dec A Support 026052 12/12/2018 125.00 847 ROCK RIVER COALITION Rock River-Membership 026053 CK 12/12/2018 90.00 865 BOARDMAN & CLARK LLP Boardman-Profess svcs 026054 CK 12/13/2018 66.964.69 131 CITY OF STOUGHTON City Stoton-Occ Med/City Stoton-JF Salary/City Stoton-Dec Life Ins/City Stoton-Dec Life Ins/City Stoton-JF Salary/City Stoton-JF Salary/City Stoton-JF Salary/City Stoton-JF Salary/City Stoton-Dec Life Ins/City Stoton-Dec Life Ins/City Stoton-JF Salary+ 026055 12/13/2018 750.00 195 STOUGHTON FOOD PANTRY Stoton Food -Donation 026056 750.00 CK 12/13/2018 257 PEP STOUGHTON Pep Stoton-Donation

Friday, January 04, 2019 Date:

Time: 11:22AM SGUNSOLUS User:

Stoughton Utilities

Check Register Summary - Standard

Period: - As of: 1/4/2019

Page: 4 of 6 Report: 03699W.rpt Company:

7430

Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description
026057	CK	12/13/2018	11,900.20	290 MID-WEST TREE & EXCAVATION, INC	Midwest-Trenching
026058	CK	12/13/2018	332.88	400 RESCO	Resco-Inventory
026059	CK	12/13/2018	57.00	584 VINING SPARKS IBG, L.P.	Vining Sparks-Safekeeping
026060	CK	12/13/2018	154.00	377 GENERAL COMMUNICATIONS, INC	General comm-Battery
026061	CK	12/13/2018	1,199.61	451 INSIGHT FS	Insight-Fuel/Insight-Fuel/Insight-Fuel
026062	CK	12/13/2018	6,988.40	727 GLS UTILITY LLC	GLS Utility-Nov Locates/GLS Utility-Nov Locates/GLS Utility-Nov Locates
026063	CK	12/13/2018	10,595.00	855 CRANE ENGINEERING SALES, INC.	Crane-Replacement/repair
026064	CK	12/28/2018	43,731.51	131 CITY OF STOUGHTON	City Stoton-Stormwater
026065	CK	12/28/2018	176.77	133 WISCONSIN SCTF	WI SCTF-Dec B Support
026066	CK	12/28/2018	272.00	133 WISCONSIN SCTF	WI SCTF-Dec B Support
026067	CK	12/28/2018	28.00	133 WISCONSIN SCTF	WI SCTF-Dec B Support
026068	CK	12/28/2018	21,925.00	207 L.W. ALLEN, INC.	LW Allen-New Pumps
026069	СК	12/28/2018	19,591.75	448 STRAND ASSOCIATES INC.	Strand-General Eng/Strand-19 Const/Strand-17 Const/Strand-18 Const/Strand-wwtp extras/Strand-Well 4 replacements/Strand-wwtp extras/Strand-18 Const/Strand-17 Const/Strand-19 Const/Strand-Prof svcs
026070	CK	12/28/2018	460.00	084 HARVEST FARMS, LLC	Harvest Farms-Dev Credits
026071	CK	12/28/2018	2,252.11	259 ITRON, INC.	Itron-Qtr Maint.
026072	CK	12/28/2018	210.20	264 ODYSSEY DESIGN	Odyssey-Shirts/Odyssey-Shirts
026073	СК	12/28/2018	1,635.00	290 MID-WEST TREE & EXCAVATION, INC	Midwest-Trenching/Midwest-Trenching/Midwest-Trenching/Midwest-Trenching/Midwest-Trenching/Midwest-Trenching
026074	СК	12/28/2018	543.48	802 JOHNSON CONTROLS SECURITY SOLUTIONS	Johnson-Office Security/Johnson-Office Security/Johnson-Office Security/Johnson-Office Security

Friday, January 04, 2019 Date:

Time: 11:22AM SGUNSOLUS User:

Stoughton Utilities

Check Register Summary - Standard

Page: 5 of 6 Report: 03699W.rpt Company: 7430

				Period: - As of: 1/4/2019	
Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description
026075	СК	12/31/2018	608,025.21	131 CITY OF STOUGHTON	City Stoton-Retainage/City Stoton-Retainage/City Stoton-JF Wages 1116/City Stoton-JF Wages 1116/City Stoton-Retainage/City Stoton-Retainage/City Stoton-JF Wages 1116/City Stoton-JF Wages 1116/City Stoton-JF Wages 1116/City Stoton-JF Wages 1116/More
026076	СК	12/31/2018	1,655.64	207 L.W. ALLEN, INC.	LW Allen-Supplies
026077	СК	12/31/2018	3,089.00	260 LR METER TESTING & REPAIR INC	LR Meter-Repairs
026078	СК	12/31/2018	252.00	290 MID-WEST TREE & EXCAVATION, INC	Midwest-Trenching
026079	СК	12/31/2018	4,985.50	362 UTILITY SERVICE CO., INC	Utility Svc-Qtr Services
026080	СК	12/31/2018	586.57	405 ROSENBAUM CRUSHING & EXCAV.	Rosenbaum-Dump fees/Rosenbaum-Dump fees
026081	СК	12/31/2018	880.00	746 ELSTER SOLUTIONS, LLC	Elster-Meter Gate
101758	CK	12/7/2018	3,553.12	852 INFOSEND, INC	Infosend-Billing & Mailing/Infosend-Billing & Mailing/Infosend-Billing & Mailing/Infosend-Billing & Mailing
101759	CK	12/7/2018	6,228.90	995 MEUW	Meuw-App Banquet/Meuw-Conference/Meuw-Safety mgmt/Meuw-Safety mgmt/Meuw-Safety mgmt
101760	CK	12/13/2018	395.00	157 FORSTER ELEC. ENG.,INC.	Forster-Tech Assist
101761	СК	12/13/2018	28.00	310 HANSON PEST MANAGEMENT	Hanson-Pest Maint.
101762	СК	12/13/2018	3,445.00	463 GREAT-WEST	Great West-Dec A Def Comp
101763	CK	12/13/2018	2,725.00	519 B & H LAWN CARE	B & H - WW Mowing/B & H - Wa Twr Mowing/B & H - West Sub Mowing/B & H - Well 6 Mowing/B & H - Well 5 Mowing/B & H - Well 5 Mowing/B & H - Admin Mowing/B & H - Cnty B Sub Mowing/B & H - South Sub Mowing/B & H - Taylor Sub Mowing/B & H - Admin Mowing+
101764	СК	12/13/2018	450.00	731 NORTH SHORE BANK FSB-DEFERRED COMP.	N Shore Bk-Dec A Def Comp
101765	CK	12/31/2018	3,145.00	463 GREAT-WEST	Great West-Dec B Def Comp

Date: Friday, January 04, 2019

Time: 11:22AM User: SGUNSOLUS

Stoughton Utilities

Check Register Summary - Standard

Period: - As of: 1/4/2019

Page: 6 of 6
Report: 03699W.rpt
Company: 7430

Check Nbr	Туре	Date	Amount Paid	Vendor ID / Name	Description
101766	CK	12/31/2018	4,867.97	603 SEERA-WIPFLI LLP	Seera-CTC Funds
101767	CK	12/31/2018	450.00	731 NORTH SHORE BANK FSB-DEFERRED COMP.	N Shore Bk-Dec B Def Comp
101768	СК	12/31/2018	3,666.53	852 INFOSEND, INC	Infosend-Nov Billing & Mailing/Infosend-Nov Billing & Mailing/Infosend-Nov Billing & Mailing/Infosend-Nov Billing & Mailing
		Company Total	1,770,164.85		

Date: Friday, December 07, 2018

Time: 08:49AM
User: SGUNSOLUS

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Company	Account	Sub	Vendor ID	Merchant	Amount	Description	Post Date	Emp ID	Projec
port ID:	009010	Imp	ort # : 00000000						
130	593	000000	148	FASTENAL COMPANY01	-69.06	LAB WATER	11/12/2018	5200	
460	833	000000	390	BADGER WATER	67.60	LAB SAMPLE DELIVERY CHARGES	11/02/2018	8300	
460	833	000000	937	SPEE-DEE DELIVERY SERVICE	28.87	LAB CHARGES	11/05/2018	8300	
460	833	000000	974	NORTHERN LAKE SERVICE, IN	71.00	LAB CHARGES	11/09/2018	8300	
460	833	000000	974	NORTHERN LAKE SERVICE, IN	416.00	LAB SUPPLIES	11/12/2018	8300	
460	833	000000	830	NCL OF WISCONSIN INC	169.50	LAB DELIVERY CHARGES	11/14/2018	8300	
460	833	000000	937	SPEE-DEE DELIVERY SERVICE	13.77	LAB CHARGES	11/19/2018	8300	
460	833	000000	974	NORTHERN LAKE SERVICE, IN	48.00	Credit card processing - online MyAccount	11/28/2018	8300	
460	840	000000	419	PAYFLOW/PAYPAL	31.49	Credit card processing - Desktop and recurring	11/05/2018	5250	
460	840	000000	419	PAYFLOW/PAYPAL	20.58	Software licensing - Hosted Microsoft Lync	11/05/2018	5250	
460	851	000000	836	MSFT E04006URUE	14.50	SOFTWARE LICENSING - ANNUAL - PRESTO AIRPRINT SERVER	11/05/2018	5250	
460	851	000000	532	COLLOBOS SOFTWARE, INC.	100.00	Software licensing - Annual - Acronis Access	11/07/2018	5250	
160	851	000000	604	CDW GOVT #PZB7739	184.69	SOFTWARE LICENSING - CISCO ASA FIREPOWER AND ANYCONNECT V	11/13/2018	5250	
160	851	000000	604	CDW GOVT #QCH6583	585.75	SOFTWARE LICENSING - 5NINE HYPERV CLUSTER MANAGER	11/23/2018	5250	
460	851	000000	994	5NINE SOFTWARE, INC.	249.50	NORDIC RIDGE EASTWOOD LIFT STATION EXPENSE	11/30/2018	5250	
460	831	000000	436	STOUGHTON LUMBER CO	128.70	WATER BOTTLE FILLING STATION	11/01/2018	8700	
160	834	000000	550	FIRST SUPPLY WFPG MAD	152.23	BELT FOR EXHAUST FAN	11/26/2018	7400	
160	834	000000	626	663 STOUGHTON BUMPER TO B	15.38	BELT FOR EXHAUST FAN	11/06/2018	8710	
160	834	000000	626	663 STOUGHTON BUMPER TO B	11.79	BATTERIES FOR LAB EQUIP	11/07/2018	8710	
460	833	000000	148	FASTENAL COMPANY01	11.48	EAST WOOD LS FLOOR REPAIRS	11/07/2018	8710	
160	831	000000	436	STOUGHTON LUMBER CO	121.35	HOSE REPAIR	11/09/2018	8710	
460	833	000000	108	ASLESON'S TRUE VALUE HDW	26.27	TOWELS	11/01/2018	8200	
460	834	000000	994	MAGID GLOVE SAFETY	89.70	HOSE REEL	11/06/2018	8200	
460	834	000000	775	NOR NORTHERN TOOL	397.99	HOSE REEL REPAIRS	11/09/2018	8200	
460	834	000000	108	ASLESON'S TRUE VALUE HDW	15.26	PRIMARY 2 ELECTRICAL REPAIRS	11/09/2018	8200	
460	833	000000	207	LW ALLEN	1,327.02	URINAL BLOCKS AND DEGREASER	11/12/2018	8200	
160	834	000000	148	FASTENAL COMPANY01	41.36	BATTERIES	11/19/2018	8200	
460	851	000000	994	IN DINGES FIRE COMPANY	187.00	GAS MONITOR CALIBRATION	11/28/2018	8200	
460	834	000000	994	IN DINGES FIRE COMPANY	95.00	EAST WOOD ELECTRIC PARTS-NEW PANEL	11/28/2018	8200	
460	832	000000	652	MENARDS MONONA WI	167.79	ELECTRICAL FITTINGS	11/29/2018	8200	
460	831	000000	108	ASLESON'S TRUE VALUE HDW	11.12	ELECTRICAL FITTINGS	11/29/2018	8200	
460	832	000000	236	GRAINGER	56.40	ELECTRICAL FITTINGS	11/30/2018	8200	
460	832	000000	236	GRAINGER	81.80	General payment processing supplies	11/30/2018	8200	
460	851	000000	352	STAPLS7207086024000002	41.51	GENERAL OFFICE SUPPLIES	11/07/2018	3680	
160	851	000000	352	STAPLS7207679977000001	13.28	GENERAL KITCHEN SUPPLIES	11/08/2018	3680	
160	851	000000	352	STAPLS7207680304000001	29.44	MEETING EXPENSE - UTILITIES COMMITTEE	11/08/2018	3680	
160	851	000000	601	SQ FOSDAL HOME BAK	2.13	General office supplies	11/20/2018	3680	
460	851	000000	409	SCHWAAB AR	54.29	LOCATOR EQUIPMENT	11/20/2018	3680	
460	831	000000	994	JENSEN EQUIPMENT	50.00	UNIFORM CLEANING	11/29/2018	8740	
460	854	000000	809	CINTAS 446	26.31	UNIFORM CLEANING	11/05/2018	4000	
460	854	000000	809	CINTAS 446	26.31	JANITORIAL	11/12/2018	4000	
460	834	000000	322	IN SUNDANCE BIOCLEAN, IN	127.50	UNIFORM CLEANING	11/13/2018	4000	

Date: Friday, December 07, 2018

Time: 08:49AM
User: SGUNSOLUS

Select By: {PSSPurchCard.RefNbr} = '0000000091'

Company	Account	Sub	Vendor ID	Merchant	Amount	Description	Post Date	Emp ID	Projec
460	854	000000	809	CINTAS 446	26.31	UNIFORM CLEANING	11/19/2018	4000	
160	854	000000	809	CINTAS 446	26.31	MISC SEWER	11/28/2018	4000	
160	833	000000	134	CRESCENT ELECTRIC 087	3.52	Credit card processing - online MyAccount	11/01/2018	4100	
150	903	000000	419	PAYFLOW/PAYPAL	23.60	Credit card processing - Desktop and recurring	11/05/2018	5250	
150	903	000000	419	PAYFLOW/PAYPAL	15.43	Software licensing - Hosted Microsoft Lync	11/05/2018	5250	
450	921	000000	836	MSFT E04006URUE	11.60	SOFTWARE LICENSING - ANNUAL - PRESTO AIRPRINT SERVER	11/05/2018	5250	
450	921	000000	532	COLLOBOS SOFTWARE, INC.	80.00	Software licensing - Annual - Acronis Access	11/07/2018	5250	
50	921	000000	604	CDW GOVT #PZB7739	147.74	SOFTWARE LICENSING - CISCO ASA FIREPOWER AND ANYCONNECT V	11/13/2018	5250	
50	921	000000	604	CDW GOVT #QCH6583	468.60	SOFTWARE LICENSING - 5NINE HYPERV CLUSTER MANAGER	11/23/2018	5250	
50	921	000000	994	5NINE SOFTWARE, INC.	199.60	SAFETY SHOES - SCOTT G.	11/30/2018	5250	
50	926	000000	578	THE SHOE BOX	208.00	Keys made for a sampling location	11/13/2018	8400	
50	642	000000	108	ASLESON'S TRUE VALUE HDW	2.98	Fluroide Water Department Lab supply	11/27/2018	8400	
50	642	000000	571	USA BLUE BOOK	39.27	water fountain part utilities building	11/29/2018	8400	
50	932	000000	108	ASLESON'S TRUE VALUE HDW	7.99	Bolts and nuts to repair valve wrenches	11/29/2018	8400	
50	678	000000	148	FASTENAL COMPANY01	9.51	CHEMICALS	11/16/2018	8700	
50	641	000000	309	HAWKINS INC	1,321.17	FLOURIDE TESTING	11/02/2018	7400	
150	642	000000	675	WI STATE HYGIENE LAB	25.00	WATER BOTTLE FILLING STATION	11/06/2018	7400	
50	932	000000	550	FIRST SUPPLY WFPG MAD	121.78	FLOURIDE TREATMENT	11/26/2018	7400	
50	652	000000	571	USA BLUE BOOK	757.28	CHEMICALS	11/28/2018	7400	
50	641	000000	309	HAWKINS INC	1,253.58	BATTERIS	11/29/2018	7400	
50	920	000000	994	IN DINGES FIRE COMPANY	187.00	GAS MONITOR CALIBRATION	11/28/2018	8200	
50	932	000000	994	IN DINGES FIRE COMPANY	95.00	General payment processing supplies	11/28/2018	8200	
50	921	000000	352	STAPLS7207086024000002	31.13	GENERAL OFFICE SUPPLIES	11/07/2018	3680	
50	921	000000	352	STAPLS7207679977000001	9.96	GENERAL KITCHEN SUPPLIES	11/08/2018	3680	
50	921	000000	352	STAPLS7207680304000001	23.55	SHIPPING OF WATER SAMPLES	11/08/2018	3680	
50	642	000000	824	UPS 1ZG194WT0326028452	9.73	SHIPPING OF WATER SAMPLES	11/08/2018	3680	
50	642	000000	824	UPS 1ZG194WT0331152263	9.73	MEETING EXPENSE - UTILITIES COMMITTEE	11/15/2018	3680	
50	921	000000	601	SQ FOSDAL HOME BAK	1.70	General office supplies	11/20/2018	3680	
50	921	000000	409	SCHWAAB AR	40.72	Shipping of water samples	11/20/2018	3680	
50	642	000000	824	UPS 1ZG194WT0338561871	9.73	UNIFORM CLEANING	11/29/2018	3680	
50	926	000000	809	CINTAS 446	35.55	UNIFORM CLEANING	11/05/2018	4000	
50	926	000000	809	CINTAS 446	35.55	JANITORIAL	11/12/2018	4000	
50	932	000000	322	IN SUNDANCE BIOCLEAN, IN	102.00	UNIFORM CLEANING	11/13/2018	4000	
50	926	000000	809	CINTAS 446	35.55	UNIFORM CLEANING	11/19/2018	4000	
50	926	000000	809	CINTAS 446	35.55	WATER INVENTORY	11/28/2018	4000	
50	232	001099	816	CORE & MAIN LP 233	72.50	Credit card processing - online MyAccount	11/28/2018	4100	
30	903	000000	419	PAYFLOW/PAYPAL	65.57	Credit card processing - online MyAccount	11/05/2018	5250	
30	233	001099	419	PAYFLOW/PAYPAL	10.49	Credit card processing - Desktop and recurring	11/05/2018	5250	
30	903	000000	419	PAYFLOW/PAYPAL	42.87	Credit card processing - Desktop and recurring	11/05/2018	5250	
30	233	001099	419	PAYFLOW/PAYPAL	6.87	Software licensing - Hosted Microsoft Lync	11/05/2018	5250	
30	921	000000	836	MSFT E04006URUE	31.90	SOFTWARE LICENSING - ANNUAL - PRESTO AIRPRINT SERVER	11/05/2018	5250	
30	921	000000	532	COLLOBOS SOFTWARE, INC.	220.00	Software licensing - Annual - Acronis Access	11/07/2018	5250	
30	921	000000	604	CDW GOVT #PZB7739	406.29	IPAD CASE REPLACEMENT - THARDING	11/13/2018	5250	
30	921	000000	604	CDW GOVT #PZH8837	45.91	SOFTWARE LICENSING - CISCO ASA FIREPOWER AND ANYCONNECT V	11/14/2018	5250	

Date: Friday, December 07, 2018

Time: 08:49AM
User: SGUNSOLUS

Select By: {PSSPurchCard.RefNbr} = '0000000091'

Stoughton Utilities Posting Preview Report

Company	Account	Sub	Vendor ID	Merchant	Amount	Description	Post Date	Emp ID	Projec
7430	921	000000	604	CDW GOVT #QCH6583	1,288.65	TRAINING EXPENSE - LODGING - WPPI JOINT SUPTS - BHOOPS	11/23/2018	5250	-
7430	920	000000	994	GLACIER CANYON LLC	82.00	Software licensing - 5nine HyperV Cluster Manager	11/26/2018	5250	-
7430	921	000000	994	5NINE SOFTWARE, INC.	548.90	SHIPPING A METER BACK TO MANUFACTURER	11/30/2018	5250	-
7450	676	000000	164	THE UPS STORE 3617	14.75	SAWZALL BLADES	11/05/2018	5200	-
7430	593	000000	108	ASLESON'S TRUE VALUE HDW	15.99	Bolts and Washers	11/06/2018	5200	-
7430	593	000000	148	FASTENAL COMPANY01	91.57	Bolts and washers	11/07/2018	5200	-
7430	594	000000	148	FASTENAL COMPANY01	91.57	Streets charged by error will refund	11/07/2018	5200	-
7430	593	000000	148	FASTENAL COMPANY01	69.06	Parts for electric truck	11/08/2018	5200	-
7430	933	000000	269	UTILITY SALES & SERV	198.77	Parts for west sub gatekeeper	11/15/2018	5200	-
7430	592	000000	108	ASLESON'S TRUE VALUE HDW	20.29	WATER BOTTLE FILLING STATION	11/27/2018	5200	-
7430	932	000000	550	FIRST SUPPLY WFPG MAD	334.89	General payment processing supplies	11/26/2018	7400	-
7430	921	000000	352	STAPLS7207086024000002	86.49	GENERAL PAYMENT PROCESSING SUPPLIES	11/07/2018	3680	-
7430	233	001099	352	STAPLS7207086024000002	13.86	GENERAL OFFICE SUPPLIES	11/07/2018	3680	-
7430	921	000000	352	STAPLS7207679977000001	27.67	GENERAL OFFICE SUPPLIES	11/08/2018	3680	-
7430	233	001099	352	STAPLS7207679977000001	4.43	GENERAL KITCHEN SUPPLIES	11/08/2018	3680	-
7430	921	000000	352	STAPLS7207680304000001	64.76	MEETING EXPENSE - UTILITIES COMMITTEE	11/08/2018	3680	-
7430	921	000000	601	SQ FOSDAL HOME BAK	4.67	General office supplies	11/20/2018	3680	-
430	921	000000	409	SCHWAAB AR	113.11	General office supplies	11/20/2018	3680	-
430	233	001099	409	SCHWAAB AR	18.11	Email marketing campaign subscription - 1year - WPPI Reimbursed	11/20/2018	3680	-
430	143	000000	994	EIG CONSTANTCONTACT.COM	459.00	GAS TO ATTEND OSI OPEN SYSTEMS INTERNATIONAL TRAINING PLYM	11/30/2018	3680	-
430	588	000000	894	HOLIDAY STNSTORE 0107	42.46	J. MOWERY LODGING FOR OSI TRAINING PLYMOTH MN	11/09/2018	5296	-
430	588	000000	894	COMFORT INN PLYMOUTH	446.25	DUPLICATE KEYS FOR APARTMENT METERS/TRUCKS	11/12/2018	5296	-
450	675	000000	108	ASLESON'S TRUE VALUE HDW	20.39	OSI - OPEN SYSTEMS INTERNATIONAL TRAINING	11/07/2018	5275	-
430	588	000000	894	COMFORT INN PLYMOUTH	446.25	GAS	11/12/2018	6980	-
430	933	000000	894	KWIK TRIP 39000003905	43.59	UNIFORM CLEANING	11/30/2018	6940	-
430	926	000000	809	CINTAS 446	186.26	UNIFORM CLEANING	11/05/2018	4000	-
430	926	000000	809	CINTAS 446	186.26	JANITORIAL	11/12/2018	4000	-
430	932	000000	322	IN SUNDANCE BIOCLEAN, IN	280.50	FORKLIFT MAINT	11/13/2018	4000	-
430	934	000000	994	CAPITAL EQUIPMENT	69.00	UNIFORM CLEANING	11/13/2018	4000	-
430	926	000000	809	CINTAS 446	186.26	UNIFORM CLEANING	11/19/2018	4000	-
7430	926	000000	809	CINTAS 446	186.26	ELECTRIC INVENTORY	11/28/2018	4000	-
7430	232	001099	134	CRESCENT ELECTRIC 087	409.01	ELECTRIC INVENTORY	11/01/2018	4100	-
430	232	001099	355	STUART C IRBY	245.00	MISC ELECTRIC	11/06/2018	4100	-
7430	593	000000	355	STUART C IRBY	344.25	MISC ELECTRIC	11/06/2018	4100	-
430	594	000000	134	CRESCENT ELECTRIC 087	35.30	MISC ELECTRIC	11/28/2018	4100	-
430	107.14	000000	134	CRESCENT ELECTRIC 087	8.25	MISC ELECTRIC	11/28/2018	4100	180219XX - 1
430	932	000000	422	AMZN MKTP US M01C91EK0	33.84	DRILL FOR BRYCES TRUCK	11/29/2018	4100	-
430	593	000000	115	HOMEDEPOT.COM	74.50	DRILL FOR BRYCES TRUCK	11/29/2018	4100	-
430	594	000000	115	HOMEDEPOT.COM	74.50	CARRYING CASE	11/29/2018	4100	-
430	593	000000	422	AMAZON.COM M07V681V0	35.68	CARRYING CASE	11/30/2018	4100	-
'430	594	000000	422	AMAZON.COM M07V681V0	35.69	REFUND OF STREETS PURCHASE	11/30/2018	4100	-

Total: 18,492.76

Stoughton Utilities

Financial Summary October 2018-YTD

Highlights-Comparison to prior month

I have no concerns with the utility's financial status. The following items are meant to illustrate significant changes in the financial summary from prior periods.

Overall Summary:

- The October 2018 results are reasonable in comparison to the September 2018 and October 2017 results. Detailed analysis is provided below.

Electric Summary:

- Sales have increased \$20,000 compared to YTD 2017.
- Purchased power costs have decreased \$100,000 compared to YTD 2017 mainly due to a much lower cost per MWh from WPPI.
- Operating expenses have increased \$115,000 compared to YTD 2017 mainly due to wage increases, the installation of fault indicators city-wide and retirements.
- Depreciation and PILOT expenses have increased \$141,000 compared to YTD 2017 mainly due to the increase in plant balances related to the West Substation.
- The rate of return is currently 4.4% compared to 5.03% at the same time last year.
- Unrestricted cash balances are at 4.1 months of sales (Goal is 6 months).

Water Summary:

- Sales have increased \$12,300 compared to YTD 2017.
- Other revenues have increased \$4,900 compared to YTD 2017 mainly due to increased bulk water sales and tower rental fees.
- Operating expenses have decreased \$24,600 compared to YTD 2017 partly due to reduced health insurance costs and the meter chamber replacement program in 2017.
- Depreciation and PILOT expenses have increased \$41,000 compared to YTD 2017 due to increases in plant balances.
- Non-operating expenses have decreased \$33,000 compared to YTD 2017 mainly due to the timing of debt service accounting entries. This will fall more in line at the end of the year.
- The rate of return is currently 2.39% compared to 3.22% at the same time last year.
- Unrestricted cash balances are at 2.8 months of sales (Goal is 6 months).

Wastewater Summary:

- Sales have increased \$5,300 compared to YTD 2017. Consumption is equal to 2017.
- Depreciation has increased \$26,600 compared to YTD 2017 due to increases in plant balances.
- Non-operating expenses have decreased \$10,000 compared to YTD 2017 mainly due to the timing of debt service accounting entries. This will fall more in line at the end of the year.
- Unrestricted cash balances are at 11.32 months of sales (Goal is 6 months).

Submitted by: Ryan Wiesen

Balance Sheets As of October 31, 2018

	 Electric	 Water	 Vastewater	 Combined
Assets				
Cash & Investments	\$ 6,662,965	\$ 1,348,118	\$ 3,400,442	\$ 11,411,525
Customer A/R	1,311,982	210,437	187,535	1,709,953
Other A/R	35,546	(1,758)	4	33,792
Other Assets	1,061,152	273,812	148,807	1,483,772
Plant in Service	26,556,518	15,531,573	29,562,218	71,650,308
Accumulated Depreciation	(14,185,069)	(5,491,380)	(11,698,035)	(31,374,484)
Plant in Service - CIAC	3,496,230	7,589,175	-	11,085,405
Accumulated Depreciation-CIAC	(1,729,733)	(2,109,591)	-	(3,839,324)
Construction Work in Progress	3,886,995	154,521	246,242	4,287,758
GASB 68 Deferred Outflow	 457,351	 157,142	173,873	 788,366
Total Assets	\$ 27,553,936	\$ 17,662,049	\$ 22,021,086	\$ 67,237,071
Liabilities + Net Assets				
Accounts Payable	\$ 87,391	\$ 64,198	\$ 45,048	\$ 196,637
Payable to City of Stoughton	418,385	365,382	· -	783,767
Interest Accrued	9,066	4,161	2,232	15,459
Other Liabilities	692,990	99,242	128,074	920,306
Long-Term Debt	5,138,833	2,703,378	4,568,264	12,410,475
Net Assets	20,985,183	14,347,402	17,189,710	52,522,294
GASB 68 Deferred Inflow	222,090	 78,286	 87,758	 388,134
Total Liabilities + Net Assets	\$ 27,553,936	\$ 17,662,049	\$ 22,021,086	\$ 67,237,071

Year-to-Date Combined Income Statement
October 2018

	 Electric	-	Water	٧	Vastewater		Total
Operating Revenue:							
Sales	\$ 12,770,523		\$ 1,713,908	\$	1,652,510	\$	16,136,941
Other	80,927		58,532		68,018		207,477
Total Operating Revenue:	\$ 12,851,451		\$ 1,772,440	\$	1,720,528	\$	16,344,419
Operating Expense:							
Purchased Power	9,643,435		-		-		9,643,435
Expenses (Including Taxes)	1,377,172		755,333		770,464		2,902,969
PILOT	373,330		365,000		-		738,330
Depreciation	927,580		411,000		705,830		2,044,410
Total Operating Expense:	\$ 12,321,517		\$ 1,531,333	\$	1,476,294	\$	15,329,144
Operating Income	\$ 529,934		\$ 241,107	\$	244,234	\$	1,015,275
Non-Operating Income	377,550		44,164		62,540		484,254
Non-Operating Expense	 (129,986)		(48,840)		(102,250)		(281,076)
Net Income	\$ 777,498		\$ 236,431	\$	204,524	\$	1,218,453

STOUGHTON UTILITIES

Year-to-Date Combined Income Statement October 2017

			1 2017				
	Electric		Water	٧	Vastewater		Total
Operating Revenue:							
Sales	\$ 12,751,100		\$ 1,701,523	\$	1,647,226	\$	16,099,850
Other	105,446		\$ 53,673	\$	67,950		227,070
Total Operating Revenue:	\$ 12,856,547		\$ 1,755,197	\$	1,715,177	\$	16,326,920
Operating Expense:							
Purchased Power	9,745,057		-		-		9,745,057
Expenses (Including Taxes)	1,261,386		779,963		784,020		2,825,369
PILOT	330,000		350,830		-		680,830
Depreciation	829,880		383,920		679,170		1,892,970
Total Operating Expense:	\$ 12,166,323		\$ 1,514,713	\$	1,463,190	\$	15,144,227
Operating Income	\$ 690,224		\$ 240,483	\$	251,986	\$	1,182,693
Non-Operating Income	405,990		46,597		57,813		510,401
Non-Operating Expense	(122,998)		(82,073)		(112,500)		(317,571)
Net Income	\$ 973,216		\$ 205,007	\$	197,300	\$	1,375,523

Detailed Monthly Income Statements October 2018

ELECTRIC

						Char	ge from Prior		
	0	ctober 2018	Se	September 2018		Month		0	ctober 2017
Operating Revenue:									
Sales	\$	1,081,814	\$	1,319,604		\$	(237,791)	\$	1,134,936
Other		(19,420)		1,221			(20,641)		2,958
Total Operating Revenue:	\$	1,062,394	\$	1,320,825		\$	(258,431)	\$	1,137,894
Operating Expense:									
Purchased Power		781,584		1,013,585			(232,001)		834,606
Expenses (Including Taxes)		169,423		109,540			59,883		99,317
PILOT		37,333		37,333			-		33,000
Depreciation		92,758		92,758			-		82,988
Total Operating Expense:	\$	1,081,098	\$	1,253,216		\$	(172,119)	\$	1,049,911
Operating Income	\$	48,905	\$	67,609		\$	(18,704)	\$	87,983
Non-Operating Income		32,586		28,036			4,550		50,268
Non-Operating Expense		(9,912)		(9,885)			(27)		(10,595)
Net Income	\$	3,970	\$	85,760		\$	(81,790)	\$	127,656

WATER

					Ch	nange from Prior		
	Oc	tober 2018	Sep	tember 2018		Month	0	ctober 2017
Operating Revenue:								
Sales	\$	189,069	\$	166,905	\$	22,164	\$	178,339
Other		5,327		5,366		(39)		5,117
Total Operating Revenue:	\$	194,397	\$	172,271	\$	22,125	\$	183,456
Operating Expense:								
Expenses (Including Taxes)		67,471		66,927		544		84,426
PILOT		36,500		36,500		-		35,083
Depreciation		41,100		41,100		-		38,392
Total Operating Expense:	\$	145,071	\$	144,527	\$	544	\$	157,901
Operating Income	\$	49,325	\$	27,744	\$	21,581	\$	25,555
Non-Operating Income		1,895		5,563		(3,668)		1,441
Non-Operating Expense		(4,258)		(4,258)		-		(7,833)
Net Income	\$	46,962	\$	29,049	\$	17,913	\$	19,162

WASTEWATER

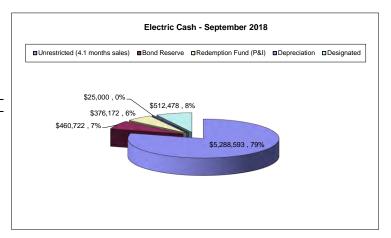
		WASILWAIL	•••					
					Char	nge from Prior		
	Oc	tober 2018	Sept	September 2018		Month	Oc	tober 2017
Operating Revenue:								
Sales	\$	161,524	\$	158,600	\$	2,924	\$	165,448
Other		6,969		10,504		(3,535)		10,320
Total Operating Revenue:	\$	168,493	\$	169,104	\$	(611)	\$	175,768
Operating Expense:								
Expenses (Including Taxes)		64,775		77,423		(12,648)		70,898
Depreciation		70,583		70,583		-		67,917
Total Operating Expense:	\$	135,358	\$	148,006	\$	(12,648)	\$	138,815
Operating Income	\$	33,136	\$	21,098	\$	12,037	\$	36,954
Non-Operating Income		2,414		2,122		292		1,287
Non-Operating Expense		(10,225)		(10,225)		-		(11,250)
Net Income	\$	25,325	\$	12,996	Ś	12,329	Ś	26,990

Rate of Return Year-to-Date October 2018

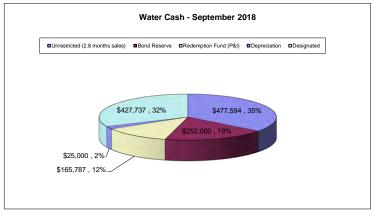
	Electric	Water
Operating Income (Regulatory)	\$ 529,934	\$ 241,107
Average Utility Plant in Service	25,888,767	15,448,004
Average Accumulated Depreciation	(13,789,883)	(5,205,657)
Average Materials and Supplies	232,027	40,485
Average Regulatory Liability	(121,884)	(188,258)
Average Customer Advances	(155,394)	-
Average Net Rate Base	\$ 12,053,633	\$ 10,094,574
October 2018 Rate of Return	4.40%	2.39%
October 2017 Rate of Return	5.03%	2.26%
December 2017 Rate of Return	6.46%	3.22%
Authorized Rate of Return	5.00%	5.25%

Cash and Investments Summary
As of October 31, 2018

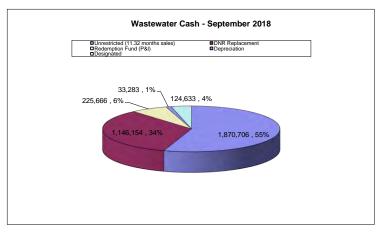
Electric	Od	tober 2018
Unrestricted (4.1 months sales)	\$	5,288,593
Bond Reserve	\$	460,722
Redemption Fund (P&I)	\$	376,172
Depreciation	\$	25,000
Designated	\$	512,478
Total	\$	6,662,965



Water	Oc	tober 2018
Unrestricted (2.8 months sales)	\$	477,594
Bond Reserve	\$	252,000
Redemption Fund (P&I)	\$	165,787
Depreciation	\$	25,000
Designated	\$	427,737
Total	\$	1,348,118



Wastewater	October 2018
Unrestricted (11.32 months sales)	1,870,706
DNR Replacement	1,146,154
Redemption Fund (P&I)	225,666
Depreciation	33,283
Designated	124,633
Total	3,400,442



Stoughton Utilities

Financial Summary November 2018-YTD

Highlights-Comparison to prior month

I have no concerns with the utility's financial status. The following items are meant to illustrate significant changes in the financial summary from prior periods.

Overall Summary:

- The November 2018 results are reasonable in comparison to the October 2018 and November 2017 results. Detailed analysis is provided below.

Electric Summary:

- Sales have decreased \$33,000 compared to YTD 2017 mainly due to a decrease in PCAC of \$534,000 offset by a 4.94% increase in consumption.
- Purchased power costs have decreased \$150,000 compared to YTD 2017 mainly due to a much lower cost per MWh from WPPI.
- Operating expenses have increased \$51,000 compared to YTD 2017 mainly due to wage increases, retirements and paying longevity in Nov 18 vs Dec 17.
- Depreciation and PILOT expenses have increased \$155,000 compared to YTD 2017 mainly due to the increase in plant balances related to the West Substation.
- The rate of return is currently 4.16% compared to 4.98% at the same time last year.
- Unrestricted cash balances are at 4.0 months of sales (Goal is 6 months).

Water Summary:

- Sales have increased \$27,800 compared to YTD 2017 mainly due to increased customer counts and the October rate increase offset by a 3% decrease in consumption.
- Other revenues have increased \$5,100 compared to YTD 2017 mainly due to increased bulk water sales and tower rental fees.
- Operating expenses have increased \$34,500 compared to YTD 2017 partly due to increased main maintenance and increased wages and benefits.
- Depreciation and PILOT expenses have increased \$43,400 compared to YTD 2017 due to increases in plant balances.
- Non-operating expenses have decreased \$36,800 compared to YTD 2017 mainly due to the timing of debt service accounting entries. This will fall more in line at the end of the year.
- The rate of return is currently 2.36% compared to 3.00% at the same time last year.
- Unrestricted cash balances are at 2.4 months of sales (Goal is 6 months).

Wastewater Summary:

- Sales have increased \$4,300 compared to YTD 2017. Consumption is equal to 2017.
- Operating expenses have increased \$32,100 compared to YTD 2017 mainly due to required screw painting and wages and benefits.
- Depreciation has increased \$29,300 compared to YTD 2017 due to increases in plant balances.
- Non-operating expenses have decreased \$11,300 compared to YTD 2017 mainly due to the timing of debt service accounting entries. This will fall more in line at the end of the year.
- Unrestricted cash balances are at 11.2 months of sales (Goal is 6 months).

Submitted by: Jamin Friedl, CPA

Balance Sheets As of November 30, 2018

A	 Electric	 Water	 Wastewater		Combined
Assets					
Cash & Investments	\$ 6,598,146	\$ 1,388,998	\$ 3,416,677	\$	11,403,821
Customer A/R	1,315,849	212,428	189,997		1,718,273
Other A/R	25,365	152	4		25,521
Other Assets	1,014,151	284,882	155,057		1,454,089
Plant in Service	26,649,019	15,534,009	29,564,994		71,748,021
Accumulated Depreciation	(14,283,039)	(5,532,941)	(11,766,118)		(31,582,098)
Plant in Service - CIAC	3,511,216	7,589,175	-		11,100,391
Accumulated Depreciation-CIAC	(1,729,733)	(2,109,591)	-		(3,839,324)
Construction Work in Progress	3,933,842	157,297	247,160		4,338,299
GASB 68 Deferred Outflow	457,351	 157,142	 173,873		788,366
Total Assets	\$ 27,492,166	\$ 17,681,550	\$ 21,981,643	\$	67,155,360
Liabilities + Net Assets					
Accounts Payable	\$ 98,703	\$ 64,198	\$ 45,048	\$	207,949
Payable to City of Stoughton	454,101	401,500	-		855,601
Interest Accrued	18,941	4,594	9,907		33,442
Other Liabilities	621,282	87,856	113,841		822,978
Long-Term Debt	5,138,833	2,703,378	4,568,264		12,410,475
Net Assets	20,938,217	14,341,739	17,156,825		52,436,781
GASB 68 Deferred Inflow	222,090	78,286	87,758		388,134
Total Liabilities + Net Assets	\$ 27,492,166	\$ 17,681,550	\$ 21,981,643	\$	67,155,360

Year-to-Date Combined Income Statement November 2018

								_	
		Electric	Water		Wastewater			Total	
Operating Revenue:									
Sales	\$	13,877,102	\$	1,896,101	\$	1,810,651		\$	17,583,854
Other		102,283		63,847		68,813			234,942
Total Operating Revenue:	\$	13,979,385	\$	1,959,948	\$	1,879,464		\$	17,818,796
Operating Expense:									
Purchased Power		10,451,745		-		-			10,451,745
Expenses (Including Taxes)		1,596,526		868,167		883,481			3,348,174
PILOT		410,663		401,500		-			812,163
Depreciation		1,020,338		452,100		776,413			2,248,851
Total Operating Expense:	\$	13,479,272	\$	1,721,767	\$	1,659,894		\$	16,860,933
Operating Income	\$	500,113	\$	238,181	\$	219,569		\$	957,863
Non-Operating Income		370,335		45,685		64,545			480,565
Non-Operating Expense	-	(139,914)		(53,098)		(112,475)			(305,487)
Net Income	\$	730,533	\$	230,768	\$	171,639		\$	1,132,941

STOUGHTON UTILITIES

Year-to-Date Combined Income Statement November 2017

				C1 2017							
	Electric	-	Water			Wastewater			Total		
Operating Revenue:											
Sales	\$ 13,910,015		\$	1,868,313		\$	1,806,344		\$	17,584,672	
Other	109,120		\$	58,713		\$	72,400			240,233	
Total Operating Revenue:	\$ 14,019,135		\$	1,927,027		\$	1,878,744		\$	17,824,905	
Operating Expense:											
Purchased Power	10,602,005			-			-			10,602,005	
Expenses (Including Taxes)	1,545,430			833,658			851,349			3,230,437	
PILOT	363,000			385,913			-			748,913	
Depreciation	912,868			422,312			747,087			2,082,267	
Total Operating Expense:	\$ 13,423,303		\$	1,641,883		\$	1,598,436		\$	16,663,622	
Operating Income	\$ 595,832		\$	285,143		\$	280,308		\$	1,161,284	
Non-Operating Income	421,960			47,714			58,858			528,531	
Non-Operating Expense	 (133,601)			(89,906)			(123,750)			(347,257)	
Net Income	\$ 884,191		\$	242,951		\$	215,416		\$	1,342,558	

STOUGHTON UTILITIES

Detailed Monthly Income Statements November 2018

ELECTRIC

						Chan	ge from Prior			
	No	ovember 2018	(October 2018		Month		November 2017		vember 2017
Operating Revenue:										
Sales	\$	1,106,579	\$	1,081,814		\$	24,765		\$	1,158,914
Other		21,356		(19,420)			40,775			3,674
Total Operating Revenue:	\$	1,127,934	\$	1,062,394		\$	65,540		\$	1,162,588
Operating Expense:										
Purchased Power		808,309		781,584			26,726			856,948
Expenses (Including Taxes)		219,354		169,423			49,931			284,044
PILOT		37,333		37,333			-			33,000
Depreciation		92,758		92,758			-			82,988
Total Operating Expense:	\$	1,157,755	\$	1,081,098		\$	76,657		\$	1,256,980
Operating Income	\$	(29,821)	\$	48,905		\$	(78,726)		\$	(94,392)
Non-Operating Income		(7,215)		32,586			(39,801)			15,969
Non-Operating Expense		(9,929)		(9,912)			(17)			(10,602)
Net Income	\$	(46,965)	\$	3,970		\$	(50,934)		\$	(89,025)

WATER

WALEN										
						Cha	ange from Prior			
	<u> </u>	November 2018	(October 2018			Month		Nove	ember 2017
Operating Revenue:										
Sales	\$	182,193	\$	189,069		\$	(6,876)		\$	166,790
Other		5,315		5,327			(12)			5,040
Total Operating Revenue:	\$	187,508	\$	194,397		\$	(6,889)		\$	171,830
Operating Expense:										
Expenses (Including Taxes)		112,834		67,471			45,363			53,695
PILOT		36,500		36,500			-			35,083
Depreciation		41,100		41,100			-			38,392
Total Operating Expense:	\$	190,434	\$	145,071		\$	45,363		\$	127,170
Operating Income	\$	(2,926)	\$	49,325		\$	(52,251)		\$	44,660
Non-Operating Income		1,521		1,895			(374)			1,117
Non-Operating Expense		(4,258)		(4,258)			-			(7,833)
Net Income	\$	(5,663)	\$	46,962		\$	(52,625)		\$	37,944

WASTEWATER

	WASTEWATER										
						Chai	nge from Prior				
	N	ovember 2018	(October 2018			Month		Nove	ember 2017	
Operating Revenue:									Ì		
Sales	\$	158,141	\$	161,524		\$	(3,383)		\$	159,118	
Other		795		6,969			(6,174)		Ì	4,449	
Total Operating Revenue:	\$	158,936	\$	168,493		\$	(9,558)		\$	163,567	
Operating Expense:											
Expenses (Including Taxes)		113,017		64,775			48,243		Ì	67,328	
Depreciation		70,583		70,583			-		Ì	67,917	
Total Operating Expense:	\$	183,600	\$	135,358		\$	48,243		\$	135,245	
Operating Income	\$	(24,665)	\$	33,136		\$	(57,800)		\$	28,322	
Non-Operating Income		2,005		2,414			(409)		1	1,044	
Non-Operating Expense		(10,225)		(10,225)			-		Ì	(11,250)	
Net Income	\$	(32,885)	\$	25,325		\$	(58,210)		\$	18,116	
		·		·							

STOUGHTON UTILITIES

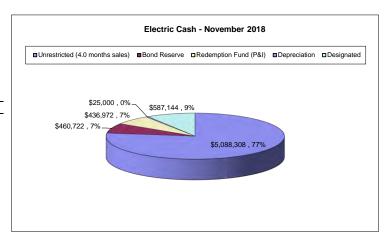
Rate of Return Year-to-Date November 2018

	Electric	Water
Operating Income (Regulatory)	\$ 500,113	\$ 238,181
A LIVE BL CO.	05 005 047	45 440 000
Average Utility Plant in Service	25,935,017	15,449,222
Average Accumulated Depreciation	(13,838,868)	(5,226,437)
Average Materials and Supplies	214,520	40,552
Average Regulatory Liability	(121,884)	(188,258)
Average Customer Advances	(161,256)	-
Average Net Rate Base	\$ 12,027,530	\$ 10,075,079
November 2018 Rate of Return	4.16%	2.36%
November 2017 Rate of Return	4.98%	3.00%
December 2017 Rate of Return	6.46%	3.22%
Authorized Rate of Return	5.00%	5.00%

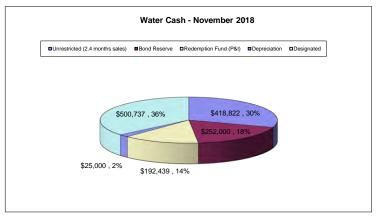
STOUGHTON UTILITIES

Cash and Investments Summary As of November 30, 2018

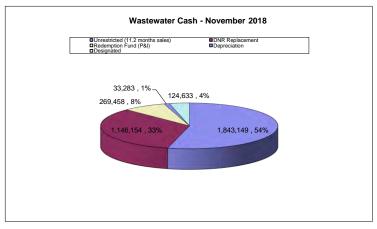
Electric	November 2018			
Unrestricted (4.0 months sales)	\$	5,088,308		
Bond Reserve	\$	460,722		
Redemption Fund (P&I)	\$	436,972		
Depreciation	\$	25,000		
Designated	\$	587,144		
Total	\$	6,598,146		



Water	Nov	November 2018		
Unrestricted (2.4 months sales)	\$	418,822		
Bond Reserve	\$	252,000		
Redemption Fund (P&I)	\$	192,439		
Depreciation	\$	25,000		
Designated	\$	500,737		
Total	\$	1,388,998		



Wastewater	November 2018
Unrestricted (11.2 months sales)	1,843,149
DNR Replacement	1,146,154
Redemption Fund (P&I)	269,458
Depreciation	33,283
Designated	124,633
Total	3,416,677



STOUGHTON UTILITIES 2018 Statistical Worksheet

Electic	Total Sales 2017 KwH	Total KwH Purchased 2017	Total Sales 2018 KwH	Total KwH Purchased 2018	Demand Peak 2017	Demand Peak 2018
January	12,379,222	12,812,545	12,609,523	13,204,183	23,662	24,195
February	10,691,419	10,759,773	11,167,697	11,394,593	21,934	22,984
March	11,785,378	11,607,813	11,302,081	11,305,664	20,399	20,886
April	9,553,672	10,048,660	10,338,769	10,759,236	18,091	19,558
May	10,496,558	10,622,971	11,809,136	12,169,996	21,934	31,336
June	12,732,532	12,662,125	12,676,500	13,057,295	32,720	32,502
July	13,227,532	13,912,583	14,229,395	14,658,088	30,828	32,727
August	12,322,240	12,624,031	14,385,615	14,667,802	28,159	30,616
September	11,483,233	11,758,812	11,670,044	12,199,565	30,090	31,030
October	10,827,374	11,031,229	11,235,526	11,610,973	21,423	23,148
November						
December						
TOTAL	115,499,160	117,840,542	121,424,286	125,027,395		

Water	Total Sales 2017 Gallons	Total Gallons Pumped 2017	Total Sales 2018 Gallons	Total Gallons Pumped 2018	Max Daily High 2017	Max Daily Highs 2018
January	37,110,000	43,748,000	35,560,000	44,660,000	1,629,000	1,668,000
February	34,905,000	41,145,000	33,594,000	41,438,000	1,780,000	1,711,000
March	38,893,000	40,725,000	36,877,000	40,980,000	1,542,000	1,449,000
April	33,884,000	39,290,000	35,745,000	40,572,000	2,105,000	1,583,000
May	38,370,000	41,634,000	39,058,000	43,612,000	1,732,000	2,087,000
June	41,534,000	46,477,000	39,092,000	44,311,000	1,876,000	1,871,000
July	37,083,000	43,980,000	41,674,000	49,321,000	2,057,000	2,194,000
August	42,414,000	45,656,000	41,375,000	45,143,000	1,839,000	1,939,000
September	41,685,000	45,250,000	37,135,000	40,005,000	1,849,000	1,657,000
October	43,903,000	48,156,000	37,627,000	41,152,000	1,950,000	1,521,000
November						
December						
TOTAL	389,781,000	436,061,000	377,737,000	431,194,000		

Wastewater	Total Sales 2017 Gallons	Total Treated Gallons 2017	Total Sales 2018 Gallons	Total Treated Gallons 2018	Precipitation 2017	Precipitation 2018
January	25,221,000	33,337,000	25,668,000	31,460,000	2.43	2.15
February	23,196,000	27,663,000	23,717,000	30,781,000	1.34	3.54
March	26,255,000	29,882,000	25,915,000	28,544,000	2.69	0.75
April	23,309,000	32,828,000	24,842,000	28,602,000	6.80	1.87
May	26,366,000	34,190,000	27,090,000	34,919,000	3.62	8.12
June	28,445,000	34,688,000	26,393,000	37,405,000	7.55	10.50
July	25,129,000	40,536,000	27,263,000	37,702,000	6.60	2.68
August	26,215,000	36,658,000	26,161,000	38,556,000	3.99	9.45
September	26,103,000	31,442,000	24,300,000	41,231,000	0.77	7.00
October	25,768,000	31,884,000	24,633,000	48,048,000	4.82	7.09
November						
December						
TOTAL	256,007,000	333,108,000	255,982,000	357,248,000	40.61	53.15

STOUGHTON UTILITIES 2018 Statistical Worksheet

Electic	Total Sales 2017 KwH	Total KwH Purchased 2017	Total Sales 2018 KwH	Total KwH Purchased 2018	Demand Peak 2017	Demand Peak 2018
January	12,379,222	12,812,545	12,609,523	13,204,183	23,662	24,195
February	10,691,419	10,759,773	11,167,697	11,394,593	21,934	22,984
March	11,785,378	11,607,813	11,302,081	11,305,664	20,399	20,886
April	9,553,672	10,048,660	10,338,769	10,759,236	18,091	19,558
May	10,496,558	10,622,971	11,809,136	12,169,996	21,934	31,336
June	12,732,532	12,662,125	12,676,500	13,057,295	32,720	32,502
July	13,227,532	13,912,583	14,229,395	14,658,088	30,828	32,727
August	12,322,240	12,624,031	14,385,615	14,667,802	28,159	30,616
September	11,483,233	11,758,812	11,670,044	12,199,565	30,090	31,030
October	10,827,374	11,031,229	11,255,649	11,610,973	21,423	23,148
November	10,909,098	11,106,960	11,189,974	11,543,695	20,487	21,992
December						
TOTAL	126,408,258	128,947,502	132,634,383	136,571,090		

Water	Total Sales 2017 Gallons	Total Gallons Pumped 2017	Total Sales 2018 Gallons	Total Gallons Pumped 2018	Max Daily High 2017	Max Daily Highs 2018
January	37,110,000	43,748,000	35,560,000	44,660,000	1,629,000	1,668,000
February	34,905,000	41,145,000	33,594,000	41,438,000	1,780,000	1,711,000
March	38,893,000	40,725,000	36,877,000	40,980,000	1,542,000	1,449,000
April	33,884,000	39,290,000	35,745,000	40,572,000	2,105,000	1,583,000
May	38,370,000	41,634,000	39,058,000	43,612,000	1,732,000	2,087,000
June	41,534,000	46,477,000	39,092,000	44,311,000	1,876,000	1,871,000
July	37,083,000	43,980,000	41,674,000	49,321,000	2,057,000	2,194,000
August	42,414,000	45,656,000	41,375,000	45,143,000	1,839,000	1,939,000
September	41,685,000	45,250,000	37,135,000	40,005,000	1,849,000	1,657,000
October	43,903,000	48,156,000	37,734,000	41,152,000	1,950,000	1,521,000
November	36,949,000	40,842,000	33,933,000	37,136,000	1,579,000	1,450,000
December						
TOTAL	426,730,000	476,903,000	411,777,000	468,330,000		

Wastewater	Total Sales 2017 Gallons	Total Treated Gallons 2017	Total Sales 2018 Gallons	Total Treated Gallons 2018	Precipitation 2017	Precipitation 2018
January	25,221,000	33,337,000	25,668,000	31,460,000	2.43	2.15
February	23,196,000	27,663,000	23,717,000	30,781,000	1.34	3.54
March	26,255,000	29,882,000	25,915,000	28,544,000	2.69	0.75
April	23,309,000	32,828,000	24,842,000	28,602,000	6.80	1.87
May	26,366,000	34,190,000	27,090,000	34,919,000	3.62	8.12
June	28,445,000	34,688,000	26,393,000	37,405,000	7.55	10.50
July	25,129,000	40,536,000	27,263,000	37,702,000	6.60	2.68
August	26,215,000	36,658,000	26,161,000	38,556,000	3.99	9.45
September	26,103,000	31,442,000	24,300,000	41,231,000	0.77	7.00
October	25,768,000	31,884,000	24,740,000	48,048,000	4.82	7.09
November	24,326,000	28,080,000	23,957,000	39,198,000	1.16	1.75
December						
TOTAL	280,333,000	361,188,000	280,046,000	396,446,000	41.77	54.90



Stoughton Utilities Activities Report November 2018

Technical Operations Division

Brian R. Hoops Assistant Utilities Director

Customer Payments: Staff processed 8,736 payments totaling \$1.51 million, including 1,580 checks, 1,696 lockbox payments, 1,085 credit cards, 1,316 *My Account* online payments, 2,070 automated bank withdrawals, 726 direct bank payments, and over \$11,000 in cash.

Delinquent Collections: As of November 1, there were 1,730 active accounts carrying delinquent balances totaling \$254,000, and 93 final-billed accounts carrying delinquent balances totaling \$8,400. Of the total amount delinquent, \$42,900 was 30 or more days past due.

- Throughout the month of November, we mailed out 10-day notices of pending disconnection to 61 delinquent commercial (electric or water services) and residential customers (water or wastewater services). All residential customers receiving notices were at least two months and \$400 delinquent.
 An additional 576 past-due notices were mailed to residential customers that have only electric service.
- On November 19, we delivered automated phone calls to 26 commercial customers providing a 24-hour final notice of pending electric service disconnection. Automated phone calls were delivered to 70 residential customers providing a 24-hour final notice of pending water service disconnection.
- One residential water services was disconnected due to a severely delinquent balance, and was reconnected the same day following payment.

We ended the month of November with \$71,800 remaining 30 or more days past-due. For comparison, 30+ day delinquencies are 9% higher than this time last year (\$65,700).

Delinquent Collections – Tax Roll: November 15 marked the end of the annual tax roll process. As of this date, all delinquent account liens that existed as of October 1 and remained unpaid were submitted to the City Treasurer for placement on the property owner's property taxes.

A total of \$10,311 was submitted to the Treasurer, which is down 27% from 2017. Throughout the entire tax roll process, a total of 89 delinquent accounts from 62 unique property owners, with combined delinquent balances of \$19,481, were cleared.

Energy Assistance: During the month of November, energy assistance (EA) payments totaling \$34,400 were received from the State of Wisconsin Public Benefits Program and applied to 134 customer accounts to assist these customers with their seasonal home heating expenses.

The Public Benefits Program began accepting customer applications for seasonal assistance on October 1 for the 2018-19 heating season. Crisis funding also remains available to eligible customers. Customer service staff has been busy providing customers and EA staff with customer's historical electrical usage data and payment histories, which are used to determine the amount of assistance benefits.

GIS Mapping: With the completion of our electric, water, and wastewater geometric networks now complete, GIS Analyst Lou Rada has been working on developing a mobile approach to utilizing the

advanced GIS features that are now available to us, including tracing and flow prediction. These processes are processor-intensive, so initial mobile use will be limited to a few tasks.

Now that the 2018 construction season is complete, Lou has also been busy obtaining GPS location data for newly installed or replaced electric and water infrastructure, as well as updating our GIS database with as-built data attributes, including costs for asset management reporting.

LED Holiday Light Exchange: Customers participated in our annual LED holiday light exchange throughout the month. Customers who donate four or more household essentials, such as toilet paper, Kleenex, toothpaste, or other items not available through food pantries, receive a free strand of energy efficient LED holiday lights and a free outdoor light timer.

Customers donated 1,100 personal essential items during the month of November. The promotion will continue through the holidays, or while supplies last.

Marketing and Customer Outreach: Customer Service Technician Brandi Yungen has been working on numerous customer outreach projects.

- Marketing materials were created and sent to customers as a billing insert or E-Billing link regarding the annual LED holiday light exchange.
- Stoughton Utilities will be collaborating with the city and area businesses and organizations on an
 advertising supplement promoting the City of Stoughton in an effort to boost economic development.
 The graphic advertisement is currently being designed; publication will be in 2019.
- We have selected an email marketing service and will be looking at utilizing email communications for those customers who have opted in to receive energy efficiency marketing materials from SU.
 We currently have 724 active customers responsible for 908 accounts who have opted in to email communications (9.0% of active customers and 9.7% of active accounts).
- An informational brochure about lead water service laterals was created that contains educational
 materials and resources for customers, including information on health risks, ownership and
 responsibility, testing, replacement options, and more. This pamphlet will be distributed throughout
 neighborhoods where lead services may be present.

Staff met to review the remaining balances in our WPPI Energy community contributions, economic development, value of public power, school education and scholarship, and local energy efficiency funds for 2018, as well as to discuss possible changes/additions to our energy efficiency efforts in 2019.

Multi-unit Metering/Billing Review: Billing & Metering Specialist Erin Goldade continued to work on full system review of all multi-unit commercial and residential buildings in our service territory to ensure the meters being billed are properly assigned to the corresponding unit. Field verifications at tenant-occupied rental units continue.

Nearly 700 units have been field verified during this process, and we have discovered one discrepancy so far. Billing adjustments were made to refund the tenants that overpaid, and to attempt to collect from the tenants who underpaid. Field verifications will continue throughout the remainder of 2018 and into early 2019.

In past months, available metering and billing data was used to perform an analysis of customer moves and periods of occupancy, allowing Erin to verify the metering setups of some properties from the office. Approximately 29% of total multi-unit properties were able to be verified using existing data.

Staff Training & Meetings: Assistant Director Brian Hoops participated in numerous meetings and training throughout the month, notably including a meeting of the WPPI Energy Member Services Advisory Group, a water operator training course that lead to the successful completion of two DNR certification exams, and meetings of the Utilities Committee and City Council.

Billing & Metering Specialist Erin Goldade attended a Northstar CIS User's Group held at WPPI Energy, which offered presentations from the software provider and technical support staff on a variety of topics related to our billing, collections, and customer service software.

Customer Service Technician Brandi Yungen attended the annual WPPI Energy Building Community Connections conference, where WPPI member utilities discuss customer outreach efforts and share community involvement ideas and activities.

Two Apprentice Linemen, Aaron Mattingly and Jesse Mowery, attended a one-week training course on our electric SCADA software system that was commissioned into service earlier this summer. These two linemen will be the advanced operators in charge of the system, and responsible for training their fellow linemen on the operation of the software package, which includes control operation, reporting, alarms, trending, and more.

Vacant Utility Substation Property: An offer to purchase the vacant property located adjacent to the new West Substation was received and has been presented to the Utilities and Finance Committees. The offer will be presented to the City Council at its first meeting in December.

Well No. 4 SCADA Communications: We began experiencing wireless communication challenges at this well in mid-October, resulting in several alarms requiring after-hour staff intervention. These communication failures were a surprise, given that the antenna and partial cabling had just been replaced in May due to corrosion issues, and since then all signal strength and interference levels were at acceptable levels. We again replaced the antenna and all cabling, however the issue remained. The issue was ultimately resolved when the antenna mast was relocated approximately five feet south – again, a surprise given that this antenna had existed in its prior location since 2013 without issue.

Electric Division

Bryce A. Sime Electric System Supervisor

DPW Garage: The service for the new Department of Public Works facility was installed and energized.

Hoel Avenue Overhead to Underground: This project was completed, and the area looks very different now that the overhead lines along Hoel Ave and crossing Highway 51 are removed. Despite the aesthetic improvements, the driver for this project was the requirement that our infrastructure be relocated to accommodate the new roundabout being installed by the Wisconsin DOT.

Hoel Avenue Apartments: The service infrastructure for this new construction has been installed. The service will be energized in early December to allow the contractors to complete construction.

Distribution System Projects: New cable was installed for the SW5 circuit loop that runs underground beneath ATC's transmission lines serving the new West Substation.

Water Division

Kent F. Thompson Water System Supervisor

Annual Gate Valve Exercising: Water Operators continued to exercise distribution and hydrant lead auxiliary valves throughout the water system. Regulation requires that all distribution valves be exercised once every two to five years, and all hydrant auxiliary valves be exercised once every five to seven years. There are currently approximately 1,300 distribution valves and 700 hydrant lead auxiliary valves

throughout the water system. We are in our fifth year of our valve-exercising program, and will have the entire valve system exercised before August 2019.

Frozen Service: There was one frozen service at a residential property, with the freeze occurring after the meter. Water operators provided the customer with the knowledge to thaw their lateral and restore service to the residence.

Large Meter Testing: Water operators worked in conjunction with a contractor to test the 18 water meters that are larger than 2" in diameter. These meters are required to be tested for accuracy biennially. We are awaiting the test results from the testing contractor.

Lead Service Laterals: Two residential customers completed replacement of their privately owned portion of lead service laterals, located from the terrace curb stop to the inside of the home. Stoughton Utilities hired a private contractor to replace the publicly owned section of the lead lateral and the curb stop so that the full service is entirely lead free.

Service Leaks: One water service leak occurred at the end of the month, and continues to leak. The leak is on the utility owned section of water lateral, and is scheduled to be repaired the first week in December. Estimated water loss will be determined following the repair, during which water operators will be able to determine the size of the service penetration.

Water Main Breaks: On Saturday November 24th we experienced two separate water main breaks in the 800 block of West Street. An estimated 450,000 gallons of water was lost from the time of initial break until the water main was repaired. Twelve residential customers experienced service interruption while repairs were being made.

Well No. 4 Communications: During the month of November, Well No. 4 experienced communication failures, which lead to us discontinuing use of the well for a period of one week. Following restoration of stable communications, the well was returned to normal operation.

Wastewater Division

Brian G. Erickson

Stoughton Utilities Wastewater System Supervisor

The wastewater treatment facility processed an average daily flow of 1.353 million gallons with a monthly total of 40.593 million gallons. The total precipitation for the month of November was 1.75 inches.

2019 Sewer Projects: Staff has been working on televising reports and verifying sewer laterals for engineers. We will be redirecting several flow directions in this project that requires a lot of coordination.

DNR Certification Exams: Wastewater Operator Phil Zweep passed the Collection System certification exam, which is a relatively new wastewater certification being offered. Phil has one remaining exam to pass in order to become an Advanced Certified Wastewater Operator.

Eastwood Lift Station: Updated equipment for this station has been received, and is scheduled to be installed during the first week in December. Wastewater and electric division staff will be installing the equipment, while a contractor will make programming updates and complete the station start-up.

Final Treatment Process: Tanks were drained while routine maintenance was completed, and antifreezing devices were installed.

Plant maintenance: Staff continues to work on maintenance and repairs of miscellaneous equipment throughout the plant. Projects have included painting, repair of the digester gas meter, draining final tanks, replacing lower screw bearings, and winterizing buildings and equipment.

Plant Treatment: With the elevated flows from recent months of rainfall, treatment at the plant has been excellent. November's rainfall totally dropped to 1.75 inches from the more than 7 inches received during October, which lead to a decrease of over 12 million gallons of plant influent flows for the month. Although flows are still higher than usual, I anticipate they will continue to decline over the winter months.

Advanced Wastewater Operator & Lab Technician Phil Linnerud has begun to modify our treatment to achieve our winter treatment limits.

We have been experiencing large amounts of soap entering the plant on Mondays, which causes our postaeration tank to become a large bubble bath. Staff is continuing to investigate to locate the source.

Sanitary Sewer System Maintenance: Staff continues to work in the collection system televising and flushing sewer mains. Staff also lowered a manhole located on Franklin Street.

WPDES Discharge Permit: We received a draft of our new permit from the Wisconsin DNR, scheduled to go into effect April 2019. Staff has been working with our engineering consultant, wastewater attorney, and representatives from the Madison Metropolitan Sewerage District to perform a thorough review of the permit limitations, including presenting a challenge to the draft ammonia limits and some permit language.

Energy Services Section of the Planning Division

Cory Neeley

Stoughton Utilities and WPPI Energy Services Representative (ESR)

2019 Energy Efficiency Programs: Staff met to discuss energy efficiency programs for 2019, and considered new program opportunities. One program under consideration for commercial and industrial customers is to give bonus incentives to companies that take advantage of our sponsored training, and use the information learned at that training to bring efficiency projects to fruition.

APPA Customer Connection Conference: I attended the APPA Customer Connections Conference in Orlando, and gave a presentation about the tunable lighting project funded by a DEED grant that Stoughton completed in 2017.

Public Works Solar Project: We are awaiting documents from the Wisconsin Public Service Commission PSC for the solar installation at the new Public Works Facility.

School District Tunable Lighting Project: We have funded the Stoughton Area School District's effort to complete the tunable lighting project. The last classroom at Fox Prairie Elementary has been outfitted with tunable lighting.

Focus on Energy Results: As of December 1, our YTD Focus on Energy savings for energy efficiency projects completed in Stoughton during 2018 has totaled 1,403,417 kWh.

Safety Services Section of the Planning Division

Andrew Paulson

Stoughton Utilities and Municipal Electric Utilities of Wisconsin Regional Safety Coordinator

ACCOMPLISHMENTS

- 1. Training
 - a. Lockout / Tagout
 - b. Spill Prevention Control and Countermeasure
- 2. Audits/Inspections

- a. Field Inspection Electric Changeover
- b. Utility Walkthrough General Inspection
- c. WWTP Walkthrough General Inspection
- d. Well Inspections
- e. Water Tower Inspections
- f. AEDs on Vehicles
- g. First Aid Supplies

3. Compliance/Risk Management

- a. Updated written program hard copies at WWTP
- b. Personal protective equipment hazard assessments completed for all teams
- c. Reviewed all confined space SOPs
- d. SDS updates into MSDS Online
- e. Updated SharePoint with all training documents and folders with hard copies

GOALS AND OBJECTIVES

1. Training

a. Fire extinguisher for office staff

2. Audits/Inspections

- a. Field inspections
- b. Utility walkthrough
- c. WWTP walkthrough
- d. Wells
- e. Water towers

3. Compliance/Risk Management

- a. Organize files
- b. Double-check 2018 files and records

Regional Safety Coordinator was at Stoughton Utilities on November 1st, 5th, 8th, and 29th.

Please visit us on our website at www.stoughtonutilities.com to view current events, follow project schedules, view Utilities Committee meeting notices, packets and minutes, review our energy conservation programs, or to learn more about your Stoughton Utilities electric, water, and wastewater services. You can also view your current and past billing statements, update your payment and billing preferences, enroll in optional account programs, and make an online payment using <a href="https://www.mys.gov/my.go



Stoughton Utilities Activities Report December 2018

Technical Operations Division

Brian R. Hoops Assistant Utilities Director

Customer Payments: Staff processed 8,681 payments totaling \$1.44 million, including 1,524 checks, 1,773 lockbox payments, 1,075 credit cards, 1,351 *My Account* online payments, 2,073 automated bank withdrawals, 717 direct bank payments, and nearly \$8,000 in cash.

Delinquent Collections: As of December 1, there were 1,922 active accounts carrying delinquent balances totaling \$300,850, and 69 final-billed accounts carrying delinquent balances totaling \$9,800. Of the total amount delinquent, \$71,800 was 30 or more days past due.

- Throughout the month of December, we mailed out 10-day notices of pending disconnection to 100 delinquent commercial (electric or water services) and residential customers (water or wastewater services). All residential customers receiving notices were at least two months and \$400 delinquent.
 An additional 507 past-due notices were mailed to residential customers that have only electric service.
- On December 19, we delivered automated phone calls to 20 commercial customers providing a 24-hour final notice of pending electric service disconnection. Automated phone calls were delivered to 37 residential customers providing a 24-hour final notice of pending water service disconnection.
- Two residential water services were disconnected due to severely delinquent balances.

We ended the month of December with \$95,100 remaining 30 or more days past-due. For comparison, 30+day delinquencies are 8% higher than this time last year (\$87,300).

Energy Assistance: During the month of December, energy assistance (EA) payments totaling \$15,100 were received from the State of Wisconsin Public Benefits Program and applied to 71 customer accounts to assist these customers with their seasonal home heating expenses.

The Public Benefits Program began accepting customer applications for seasonal assistance on October 1 for the 2018-19 heating season. Crisis funding also remains available to eligible customers. Customer service staff has been busy providing customers and EA staff with customer's historical electrical usage data and payment histories, which are used to determine the amount of assistance benefits.

LED Holiday Light Exchange: Customers participated in our annual LED holiday light exchange throughout the month. Stoughton Utilities had partnered with the Stoughton Personal Essentials Pantry to collect donations of household essentials that aren't provided at the food pantry, including toilet paper, Kleenex, toothpaste, soap winter mittens, and more. Customers who donated four items received both a string of energy efficient LED holiday lights and their choice of an indoor or outdoor light timer.

This customer incentive ran throughout the holiday season, and 239 customers participated, contributing over 1,400 items for the Stoughton Personal Essentials Pantry. Although not required this year, customers also dropped off six boxes of older incandescent holiday lights for responsible recycling.

Electric Division

Bryce A. Sime Electric System Supervisor

Highway 138 South Rebuild: Staff continued to work on the overhead rebuild of this line, which extends along Highway 138 South to just before Hogie Road. There still remains several poles left to be pulled, which will occur in early 2019 as weather permits

Distribution System Projects: New underground cable was installed for the SW5 circuit loop that runs underground beneath ATC's transmission lines serving the new West Substation. This portion of the line was energized, and feeds County Highway A to the west.

Water Division

Kent F. Thompson Water System Supervisor

Continuing Education: A water operator attended a water treatment and sampling course provided by Wisconsin Rural Water Association. The course provided beneficial information to aid our water department in providing safe drinking water, and keeping our production wells operating efficiently.

Fire Hydrant Struck by Vehicle: A fire hydrant was struck near the intersection of Highway 51 and Kings Lynn Road, which broke off the hydrant. Water operators were able to repair the broken hydrant and had it back in service the following day.

Unlike Hollywood's portrayals of cars striking hydrants, a geyser of water does not shoot up into the air. This is because fire hydrants in colder climates such as Wisconsin need to be protected from freezing, so the water is shut off deep in the ground and not at the surface when a hydrant is closed.

Service Leaks: A water service leak was discovered at the end of November, and was repaired by staff in early December. An estimated 51,000 gallons of water was lost to the Yahara River before the repair was completed.

Water Main Breaks: A water main break on Vernon Street occurred on a Sunday evening in early December. Fifteen residential customers, Kegonsa Elementary School and Doctors Park were without water from 5 PM until approximately 11:30 PM when service was restored. Because the repairs were made after-hours, students were not affected, and school resumed Monday morning as scheduled. An estimated 261,000 gallons of water was lost before the main was shut off for repairs.

Well House Painting and Maintenance: Water operators have been painting the walls and ceiling inside Well 6 on Academy Street, and performing basic maintenance at all well houses. Interior maintenance tasks will continue throughout the winter.

Wastewater Division

Brian G. Erickson Stoughton Utilities Wastewater System Supervisor

The wastewater treatment facility processed an average daily flow of 1.248 million gallons with a monthly total of 38.683 million gallons. The total precipitation for the month of December was 1.86 inches.

Collection System Issues: I have been working with Assistant Director Brian Hoops and the management company for an apartment complex regarding significant amounts of prohibited debris being charged into

the sanitary sewer collection system. We continue to receive debris, including rages, plastics, and grease that jeopardize the operations of the collection system and our pumping equipment.

Eastwood Lift Station: Replacement pumps and control equipment at this station have been installed, and is now in operation.

Plant Maintenance: Staff continues to work on maintenance and repairs of miscellaneous equipment throughout the plant.

Plant Treatment: After the high levels of rainfall that we experienced throughout the summer and fall, our influent flows are returning to normal levels. 2018 wound up being the second wettest year on record, and we are hoping 2019 will bring a dryer change. Treatment at the plant has remained excellent throughout the year, with no issues caused by the rainfall.

Private Lateral Repair: After a significant period of time or us working with a homeowner, repairs to a privately owned lateral were made to prevent clear water seepage from entering the sanitary sewer collection system. It is estimated that approximately 15,000 gallons of clear water per day was entering our system due to this lateral. The repair was completed by a private contractor at the homeowner's expense, and has resulted in our Eight Street lift station run times decreasing by more than half, reducing clear water flows to the plant by approximately 450,000 gallons per month. This is equivalent to the flows of 60 homes on our system.

Sanitary Sewer System Maintenance: Staff continues to work in the collection system televising sanitary sewer mains. We have also been assisting the Department of Public Works by televising stormwater sewers in preparation for the 2019 reconstruction projects.

Energy Services Section of the Planning Division

Cory Neeley

Stoughton Utilities and WPPI Energy Services Representative (ESR)

Energy Innovation Grant: As part of the Wisconsin Office of Energy Innovation grant, I met with staff from the Wisconsin Public Service Commission on behalf of the City of Stoughton. As a follow up to this meeting, I will be enrolling most major facilities owned by the City of Stoughton into the ENERGY STAR® Portfolio Manager program.

I have begun gathering data for the facilities, and preparing for entry. Due to the current U.S. Federal Government shutdown, all ENERGY STAR tools, resources, and data services are unavailable for use.

Focus on Energy: Stoughton Utilities' customers continue to actively utilize Focus on Energy programs, in part due to our educational outreach and promotional materials. Throughout 2018, 436 SU customers completed 584 incentivized energy efficiency projects, which resulted in demand reductions of 214 kW, and over 1.5 million kWh. The largest savings came from various business and retail lighting incentives.

Information has been released from Focus on Energy on their current programs. Although there are some minor changes to the programs, the majority remain intact for 2019, with similar program requirements and funding levels.

Safety Services Section of the Planning Division

Andrew Paulson

Stoughton Utilities and Municipal Electric Utilities of Wisconsin Regional Safety Coordinator

ACCOMPLISHMENTS

1. Training

a. On hold due to holiday scheduling

2. Audits/Inspections

- a. Utility Walkthrough General Inspection
- b. WWTP Walkthrough General Inspection
- c. Well Inspections
- d. Water Tower Inspections

3. Compliance/Risk Management

- a. SDS updates into MSDS Online
- b. Updated SharePoint with all training documents and folders with hard copies

GOALS AND OBJECTIVES

1. Training

a. Fire extinguisher for office staff

2. Audits/Inspections

- a. Field inspections
- b. Utility walkthrough
- c. WWTP walkthrough
- d. Wells
- e. Water towers

3. Compliance/Risk Management

a. Double-check 2018 files and records

Regional Safety Coordinator was at Stoughton Utilities on December 11th.

Please visit us on our website at www.stoughtonutilities.com to view current events, follow project schedules, view Utilities Committee meeting notices, packets and minutes, review our energy conservation programs, or to learn more about your Stoughton Utilities electric, water, and wastewater services. You can also view your current and past billing statements, update your payment and billing preferences, enroll in optional account programs, and make an online payment using *My Account* online.



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

Serving Electric, Water & Wastewater Since 1886

Date: January 8, 2018

To: Stoughton Utilities Committee

From: Brian R. Hoops

Stoughton Utilities Assistant Director

Subject: Stoughton Utilities Committee Annual Calendar

The following calendar is provided for information and discussion. Common organization acronyms used are:

APPA American Public Power Association

AWWA American Waterworks Association

MEUW Municipal Electric Utilities of Wisconsin

WIAWWA Wisconsin chapter of the American Waterworks Association

WPPI WPPI Energy

WRWA Wisconsin Rural Water Association

WWOA Wisconsin Wastewater Operators Association

January 14, 2019 Utilities Committee Regular Meeting: RoundUp Donation; Declarations of

Official Intent

February 18, 2019 Utilities Committee Regular Meeting: Bad debt write offs

February 26, 2019 Common Council Meeting: Approve bad debt write offs

February 25-27, 2019 APPA Legislative Rally – Washington, D.C.

March 10-16, 2019 National Groundwater Awareness Week

March 18, 2019 Utilities Committee Regular Meeting: Annual Drinking Water Consumer

Confidence Report (CCR)

March 17-23, 2019 National Fix a Leak Week

March 31-April 3, 2019 APPA Engineering and Operations Conference – Colorado Springs, CO

April 1, 2019 Stoughton Utilities' five-year Wisconsin Pollutant Discharge Elimination

System (WPDES) Permit effective date.

April 15, 2019	Utilities Committee Regular Meeting: Presentation of the Utilities 2018 annual audit and management letter, and the SU tax-stabilization dividends			
April 18, 2019	National Lineman Appreciation Day			
April 23, 2019	Common Council Meeting: Approve Utilities 2018 annual audit and management letter; presentation of the tax-stabilization dividends			
May 5-11, 2019	National Drinking Water Week			
May 20, 2019	Utilities Committee Regular Meeting: Annual reorganization and selection of meeting time and date; discuss SU goals			
June 2019, Date TBD	MEUW Annual Conference – Location TBD			
June 7-12, 2019	APPA National Conference – Austin, TX			
June 9-12, 2019	AWWA Annual Conference – Denver, CO			
June 17, 2019	Utilities Committee Regular Meeting: Approve the annual Wastewater Compliance Maintenance Annual Report (CMAR); tour of well no. 5			
June 25, 2019	Common Council Meeting: Approve the CMAR			
July 15, 2019	Utilities Committee Regular Meeting: RoundUp Donation; tour of the Utilities Administration Building			
August 19, 2019	Utilities Committee Regular Meeting: Approve Declaration(s) of Official Intent; tour the Wastewater Treatment Facility			
September 13-14, 2019	WPPI Annual Meeting – Elkhart Lake			
September 16, 2019	Utilities Committee Regular Meeting: Approve the Utilities 2019 Budget and five year (2019-2023) Capital Projects Program			
October 14, 2019	Utilities Committee Regular Meeting			
October 27-30, 2019	APPA Customer Connections Conference – New Orleans, LA			
November 18, 2019	Utilities Committee Regular Meeting			
December 16, 2019	Utilities Committee Regular Meeting			



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

Serving Electric, Water & Wastewater Since 1886

Date: January 8, 2019

To: Stoughton Utilities Committee

From: Brian R. Hoops

Stoughton Utilities Assistant Director

Subject: Stoughton Utilities Communications

November 19, 2018 The November-December 2018 issue of Public Power magazine, published

by American Public Power Association (APPA) - "Redefining Smart."

(A hard-copy of the magazine will be distributed to Utilities Committee members at the meeting. The full magazine can also be viewed online at

publicpower.org)

December 4, 2018 December issue of Live Lines, a monthly newsletter published by the

Municipal Electric Utilities of Wisconsin (MEUW).

December 5, 2018 The Winter 2018 Renewable Report, a direct mailing from Stoughton

Utilities and WPPI Energy sent to all customers who participate in our

Choose Renewable program.

December 7, 2018 WPPI Energy memorandum "Things You Should Know" from WPPI

Energy President and CEO Michael Peters.

December 31, 2018 December 2018 issue of the WPPI Energy Power Report.

January 2, 2019 Stoughton Utilities press release containing details about the success of our

annual LED Holiday Light Exchange.

January 2, 2019 Thank you note from the Stoughton Personal Essentials Pantry regarding

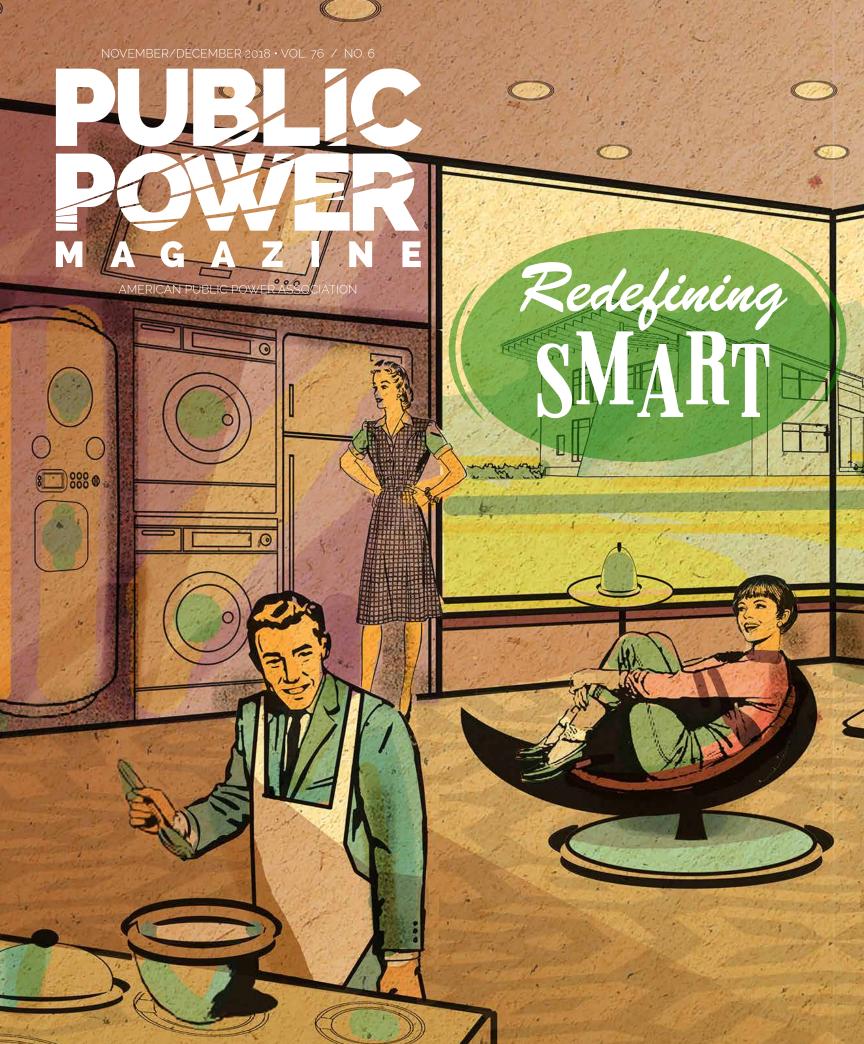
the donation of over 1,400 items and \$750 from our Community

Contributions Fund.

January 6, 2019 Stoughton Utilities billing insert regarding current utility rates and the

notification of customer rights. This information is required by the Wisconsin Public Service Commission to be provided to customers once

per year.





Roberts resigns, Nowak to return to PSC as Chair

Wisconsin's Public Service Commission (PSC) Chair Lon Roberts resigned on Nov. 30. Pending Senate approval, Department of Administration (DOA) Secretary Ellen Nowak will return to the PSC to replace him as head of the three-person agency.

Nowak left the PSC in March 2018 to lead the DOA. She served as PSC Chair from 2015 until earlier this year. She was first appointed to



Ellen Nowak

the PSC by Gov. Scott Walker in 2011. Nowak is now slated to fill out the remainder of Roberts' six-year term, which runs through 2023.

Roberts was appointed by Gov. Walker in early 2017. Roberts' resignation will take effect on Dec. 28, with Nowak replacing him the next day. The move is one of several last-minute changes ahead of the transition to Governor-elect Tony Evers' administration in January.

The term of Commissioner Rich Zipperer, who was Gov. Walker's chief of staff prior to his appointment to the Commission, expires March 1. Commissioner Mike Huebsch, who was DOA secretary prior to coming to the PSC, was appointed by Gov. Walker to serve through 2021.

If there are no more last-minute moves, Evers will appoint a new commissioner, subject to approval by the State Senate, to replace Rich Zipperer early next year.

Evers has expressed support for a "greener" future for Wisconsin. He publicly stated interest in creating incentives

to encourage the expansion of renewable energy — including solar, wind and biomass — throughout the state. Evers' appointee could help further his renewable energy goals.

While Wisconsin's municipal utilities' rates and service policies are set by local entities, the PSC still has final approval of municipal utility rates. It is also maintains regulatory oversight for long-term energy policy, wholesale power and transmission issues, environmental topics, power plant siting, among other things. In 2019, the PSC will be asked to approve projects including two solar farms, a natural gas generator in Superior, and a \$500 million transmission line between Dubuque and Madison.

"Resignations and new appointments are to be expected during times of transition," said MEUW Executive Director Tim Heinrich. "Wisconsin's municipal power providers will continue to focus on our customers' needs in the midst of political change. And, as always, we will work with the Commission staff to ensure they understand and support member utilities' collective goal of providing reliable, safe and affordable power for our communities."

INSIDE THIS MONTH'S ISSUE...

New Richmond Utilities busy keeping up with new growth

Page 4

Take precautions for winter emergencies

Page 6

What's cookin' around Wisconsin!

Page 8

Start the conversation about public power at holiday gatherings!

Page 3

Municipal Electric Utilities of Wisconsin's mission is to **strengthen and unify community-owned utilities**. Since 1928, MEUW has been the trade association for Wisconsin's 81 public power communities and is affiliated with the American Public Power Association (APPA) — www.publicpower.org

MEUW 24/7 Emergency Notification Contact Information: 1-844-MEUW 911 (1-844-638-9911)

Enjoy the peace of the season

By Tim Heinrich, MEUW Executive Director

With the mid-term elections behind us and the holiday season commanding our attention, we can all be thankful for a bit of peace and quiet. Political ads short on substance and high on rhetoric have (thankfully) disappeared. The back-and-forth messaging



APPA's Legislative Rally will be held in Washington D.C. on Feb. 25-27.

leading up to Nov. 6 now seems a distant memory.

We will take a few more weeks to let the dust settle from the elections and to celebrate the holidays, but then – on Jan. 7 – Wisconsin's 2019 Legislative Session is scheduled to begin. And once again, MEUW will advocate for energy policy that has the potential to affect Wisconsin public power providers and communities.

The November elections resulted in some notable changes in our government leadership on both the national and state level. For the first time in eight years, Democrats gained the majority in the U.S. House of Representatives, and Republicans added to their ranks in the Senate. In short, American voters delivered a divided Congress.

Specifically, in Wisconsin, our representation in the U.S. Senate also continues to be divided between parties. Our U.S. House composition remains unchanged with three Democrats and five Republications. With the change in control of the U.S. House, some analysts believe there may be increased focus at the federal level on renewable resources, energy efficiency and emerging technologies, such as battery storage. Climate change will also likely be a frequent topic.

Here at home, a new governor will soon take office as Tony Evers succeeds two-term Gov. Scott Walker. In Wisconsin's State Senate, Republicans now have control of 19 seats and the Democrats have 14. While in the State Assembly, there continues to be more Republicans compared to Democrats.

During the campaign, now Gov.-elect Evers said, "Our farms and working lands should be producing the energy to power our state. We need to restore incentives and policies to produce more solar, wind, biomass and other renewable energies here in rural Wisconsin." Time will tell what issues

make it on the short-term political agenda in Madison. We likely can expect renewable energy, subsidies for distributed generation and power plant carbon emission regulation to be part of the legislative debate this coming year.

We have already seen some shifts with the resignation of Public Service Commission of Wisconsin (PSC) Chair Lon Roberts. He will be replaced by the former PSC Chair Ellen Nowak, who left the PSC earlier this year to head the Department of Administration (see story on page one). There may be further juggling before Evers takes over in 2019, and we will need to continue to be heard in Madison.

Municipal utilities proudly played an active role in Wisconsin's recent election through Friends of Public Power. In fact, our conduit and political action committee experienced solid fundraising for the period ending with the 2018 mid-term elections. Thanks to more than \$8,000 in contributions, we were able to support candidates of both parties and build understanding about public power in Wisconsin.



We will also need to grow our political engagement in our nation's capital. Please consider joining in American Public Power Association's annual Legislative Rally in Washing-

ton, D.C., February 25 to 27. We hope we can again report that Wisconsin was well represented.

Our political strength will continue to be based on the strong ties and trust that elected officials have in our municipal utilities. Contact your representatives before they travel to Washington or Madison to remind them our members play a significant role in promoting economic development in our communities. The reliable and affordable electricity public power utilities provide helps local economies to thrive. Visit APPA's website for a list of public power providers' position on current issues. And watch for a new issue of *Under the Dome*, MEUW's legislative update, for more information on Wisconsin's topics in mid-January.

As we roll into the holidays, let's enjoy the peace of the season even as we look ahead to the changing political landscape and what it will bring in 2019 and beyond.

Wishing you and yours Happy Holidays! •



Start the conversation on the benefits of public power

The holiday season is, of course, a time for giving ... but it is also a time for celebrating and socializing. And while there is so much to love about meeting new people and catching up with extended family and old friends, sometimes making small talk can be overwhelming – even to those born with the gift of gab!

So before you head to a holiday gathering, take a moment to arm yourself with some fun facts about your job and also about the benefits of public power. Here are some ideas to get the conversation started:

- More than 2,000 public power utilities provide reliable power to 48 million Americans that's 1 in 7 electricity customers.
- Public utilities can be an economic boon to communities. Because there are
 no shareholders to please, utility revenues are reinvested into infrastructure
 and also programs and services that best suit local needs. Municipal utilities
 also create good job opportunities.
- According to the American Public Power Association (APPA), excluding major weather events, the average electric customer in the United States is without power for 2 hours and 20 minutes each year. Public power customers, on average, experienced just less than one hour without power.
- The mutual aid network among Wisconsin's public power utilities is strong; utilities take pride in helping one another.
- According to the U.S. Department of Energy, average electricity rates for all investor-owned utility customers in all customer classes are 6.9 percent higher than average rates paid by public power customers.
- Community owned power providers became popular in Wisconsin in the 1890s when local government leaders recognized the economic value of electricity, and they were not willing to just "wait" until it was brought to them.
- Wisconsin's first community-owned power company was started in New Richmond in 1890. Twenty more municipal electric companies in Wisconsin were formed by 1900. Today Wisconsin has 81 municipal power providers.



As another year closes we pause to say thanks and to send best wishes for a safe and happy holiday season

From the Staff of MUNICIPAL ELECTRIC UTILITIES of WISCONSIN

- Nebraska is the only state in the country where its residents are served entirely by public power utilities.
- According to APPA, together, U.S. public power providers employee 93,000 people and earn \$58 billion in revenue annually.



New Richmond Utilities busy keeping up with growth

By Karen Whitmer, Communications Specialist

New Richmond Utilities' employees are busier than ever installing electric, water and wastewater services for new customers. The city_ – which is near the



Minnesota border in western Wisconsin – recently ranked among Wisconsin's top five communities for issuing new building permits for single-family homes. And city officials expect further growth over the next 10 years.

While part of the community's growth can be attributed to an improved economy, another reason is the completion of the St. Croix River Crossing bridge during the summer of 2017, according to Mike Darrow, New Richmond City Administrator and Utility Manager. The bridge has created a four-lane direct pathway between western Wisconsin and the Twin Cities, replacing the smaller, outdated Stillwater Lift Bridge that was often overwhelmed with bumper-to-bumper traffic.



With a population of about 9,000, New Richmond is now an easy commute to Minneapolis and St.

Paul. "The metropolitan area is one of the most economically diverse in the country, serving as headquarters to many

Fortune 500 companies as well as a variety of small businesses, creating numerous employment opportunities," Darrow said. "New Richmond is also a progressive, welcoming community with many positives of its own."

Appropriately using the motto "the City Beautiful," New Richmond has recently attracted many new storefronts and businesses, including a chiropractor, insurance agency and a steakhouse.

There's also an Aldi, Wal-Mart and a long list of chains, including a new 60-room hotel. New Richmond is also home to growing manufacturers

such as Phillips-Medisize and Federal Foam Technologies, both of which have expanded their existing facilities.

"New Richmond has a comprehensive plan intended to provide a roadmap for preservation, growth and sustainability," Darrow said. "It's not just about parks and recreation, it's about creating the services and systems that cater to our community's needs. We work hard to preserve our small community benefits while embracing new growth."

Weston Arndt, who took over as Electric Supervisor of New Richmond Utilities about six months ago, said it has been both exciting and challenging keeping pace with the new development in the area.

"Currently we serve about 4,800 electric customers," Arndt said. "And new customer installs – both residential and commercial – are frequent requests. In addition, there are many other jobs that go hand-in-hand with new neighborhoods and commercial developments, such as installing new street lights and infrastructure improvements.

"Keeping up can sometimes be challenging for a small crew. However, we have an amazing team that cares about

Continued on page 5



The St. Croix Crossing bridge connects Oak Park Heights, Minn. to the bluffs of western Wisconsin. It took three years to construct the bridge.



Continued from page 4

our customers and enjoys the variety of work," Arndt continued.

Currently New Richmond has nearly 80 municipal employees, including about 20 that work for the utility. Arndt supervises seven on the electric side, including four journeymen.

"Although our days are busy and our work is fast-paced, safety comes first ... and that takes skill and training. We train and do safety checks, and we also look out for each other," Arndt continued.

The utility has been in existence for a long time – 128 years. In fact, New Richmond holds the honor of being the first public power community in Wisconsin.



While old when measured in years, New Richmond Utilities is certainly

young at heart and is constantly looking for new ways to satisfy its always-connected and always-on customers. It's built a large social media presence, posting updates on Facebook nearly daily. The city also recently announced a new service, Alert New Richmond, to inform customers about utility disruptions, road closures, emergency situations and more. Residents can sign up for notifications via email, text or voice messaging.

"This new system allows New Richmond to quickly and effectively notify residents about situations and conditions that affect them," Darrow said. "It's all a part of our commitment to providing exceptional customer service."

New Richmond also maintains a strong focus on protecting environmental resources and promoting energy conservation. In fact, last year, New Richmond became one of only about 20 communities in the state of Wisconsin to be recognized as a Green Tier Legacy Community by the Wisconsin DNR for its commitment to implementing sustainability measures.

Three years ago, the utility partnered with WPPI Energy to build a community solar array. River Falls Municipal Utilities also partnered with WPPI on a similar solar pilot program. These two projects were the first municipally owned community solar gardens in Wisconsin.



In 2015, New Richmond Utilities partnered with WPPI Energy to build a community solar garden.

In basic terms, a solar electric array generates renewable energy or bill credits to customers who choose to participate. Program participants can be residential or commercial customers. They pay to subscribe to the program, and in turn, receive a credit on their monthly electric bill based on the solar energy production of the project.

New Richmond's solar garden has 810 panels — each measuring about 3.5 feet by 6.5 feet and capable of generating 315 watts. The credit amount to participating customers depends on how often the sun was shining during the month! "Today's customers are informed and educated, and we need to give them choices in how they consume and manage their energy," Arndt said. "Our solar garden is just one of the options we are proud to give our customers."

Furthering its goals to protect the environment and to meet customers' changing needs, the city is also planning to install electric car charging stations. "The sales of zero-emission vehicles are expected to increase throughout the state," Darrow said. "And we intend to help cultivate that expansion."

Additionally, through Focus on Energy, New Richmond Utilities encourages a variety of energy conservation initiatives including furnace tune-ups, LED light exchanges and smart thermostat bundle packages.

While New Richmond may be growing due in part to its proximity to the Twin Cities, city and utility employees work hard to help make the community a great place to live, work and play. And it seems they have found just the right formula to help foster New Richmond's continued health and growth well into the future.



Take precautions for winter emergencies

By Mike Czuprynko, Manager of Safety Services

Wisconsin winters are known for being harsh, mean and – sometimes – downright miserable.

As you know, Wisconsin's utilities face additional hurdles and complications during the winter ... even after storms have subsided. Utilities have to contend with icy roads, branches coming down from heavy snow, power outages caused by ice build-up, and much more.

Therefore, take time to make sure you are properly prepared for the long winter. Here are a few tips to help:

EMPLOYEE SAFETY

- Avoid slips, trips and falls. Make sure you're wearing the proper footwear for your working conditions, watch your steps, and proactively salt walkways and work surfaces when applicable.
- Wear loose, lightweight, warm clothes in layers; remove layers as necessary to avoid perspiration and subsequent chill.
- Stay hydrated when working. We all know this is vital in the summer. But it is equally as important during the winter, as our bodies are constantly consuming energy to stay warm.
- Work in pairs. The weather can cause unexpected problems during the winter, so it is vital to always look out for each other.
- Take adequate breaks, especially if is there is a wind chill. Similar to a sunburn in the summer, frost bite can cause big issues in the winter.

LINEWORKER SAFETY

- Climb the icy side of pole, always keeping your climbing belt on the less icy side of the utility pole to avoid slipping.
- Make sure to use appropriately rated slings during winter work, as power lines are significantly heavier when covered in snow and ice.
- Use cleats for outrigger pads, so the truck doesn't slide. Remember to keep 50 percent of the vehicle's weight on the pads and 50% on the tires.

- Sand around the truck to avoid slips and falls.
- Place warning signs far enough ahead of the work zone, so drivers can safely slow or stop in icy conditions.



EQUIPMENT/READINESS PREPARATION

- Establish (or revisit) relationships with key vendors to ensure that critical equipment/supplies inventories are managed proactively. This can help avoid "panic purchases" made under extreme time/logistics limitations, which can result in over-buying at premium prices.
- Create a "critical needs list" to include items such as poles, cross-arms, insulators, conductors, squeeze-ons, splices, transformers, hardware, etc.
- Create a storm response team made up of representatives from your utility, local emergency services/ authorities, key utility users and critical vendors.
- Establish an "action triggers" plan based on the paths and strengths of storms to establish most likely response timing. Running through some scenarios prior to storm seasons could enhance the effectiveness of such a plan.
- Plan ahead for extra personnel and equipment. Have people and equipment on call in anticipation of a mutual aid event to avoid being in a position where help is needed but no one is on call or available.
- If you are hit hard with a winter storm and would like to request mutual assistance from other Wisconsin municipal power providers, contact MEUW 24/7 emergency notification line at 844-MEUW-911 (844-638-9911).



Sue Kelly to retire from APPA at the end of 2019



Sue Kelly

American Public Power Association (APPA) President and CEO Sue Kelly recently announced that she will retire at the end of 2019.

APPA Chair Coleman Smoak said that the Executive Committee of the APPA Board is now planning for the transition and will conduct

an in-depth assessment in early 2019 of APPA's future leadership needs.

"Sue is committed to ensuring the Association continues to thrive in 2019," said Smoak. "She and her excellent staff will continue their good work throughout next year to make this a smooth transition."

Kelly has been with APPA since 2004 and has served as

President and CEO since 2014. On her blog, Kelly wrote, "I provided plenty of notice to the APPA's Executive Committee and Board to give them the time to consider what kind of leader the next CEO needs to be, and to recruit the best possible candidate to fill the position. In the meantime, I plan to 'finish strong,' and look forward to a fulfilling final year."

Before Kelly retires, she will be the featured speaker at MEU-W's 90th Annual Conference — to be held May 15-17, 2019 — at the Lake Lawn Resort in Delavan.

Conference attendees will also have the opportunity to hear about the latest developments in utility policy and regulation, as well as other issues currently affecting public power providers. In addition, MEUW leadership will present the annual awards for safety and performance excellence at the conference.

Visit <u>www.MEUW.org</u> for more information on the Annual Conference. •

Scholarships available through DEED Program

The American Public Power Association (APPA) awards student research grants and internships each year to university students as part of its Demonstration of Energy & Efficiency Developments (DEED) Program.

APPA annually awards 10 \$4,000 student research grants/internships to undergraduate/graduate university students to conduct research on a project or to work as an intern for a DEED member electric utility that mentors the student. Up to \$1,000 in travel funds are included to attend an applicable industry conference. A mid-project report, final report and abstract are required.

Through the DEED program, APPA also awards 10 \$2,000 Educational Scholarships to high school seniors, high school graduates or college undergraduates interested in a technical career in the electric utility industry. The student's application must

be sponsored by a public power provider that will act as a mentor to the student.

The next application deadline is coming up on Feb. 15. If your utility has a potential intern or student you are interested in sponsoring, please visit www.publicpower.org/
DEED or contact DEED program staff at DEED@PublicPower.org for more information. •







This month's feature recipe comes from MEUW's own Mallory Conradt. Mallory joined MEUW as a Member Services Specialist back in August. Mallory is an

experienced event planner, sales manager and marketer with customer service and leadership experience in the hospitality and property-management fields.

You may have already talked with Mallory, as she is the point person for addressing member inquiries, coordinating MEUW programs and events and supporting the day-to-day operations of the association. Mallory is excited to be traveling to various MEUW training classes to meet member utility employees and to make sure everything is running smoothly. However, she is always happy to return back to her home in Sun Prairie and to prepare a delicious, comforting meal. Here is one of her favorites that is perfect for a cold December night!

30-MINUTE SHEPHERD'S PIE

Ingredients

- 2 lbs Russet potatoes, peeled and cubed
- 2 T. sour cream or softened cream cheese
- 1 large egg yolk
- ½ c. heavy cream (or chicken or vegetable broth for a lighter version)
- Salt and ground black pepper to taste
- 1 T. extra virgin olive oil
- 1 ¾ lbs ground beef (or ground turkey for a lighter version)
- 1 carrot, peeled and diced

- 1 yellow onion, diced
- 2 T. butter
- 2 T. all-purpose flour
- 1 c. beef stock
- 2 t. Worchester sauce
- 1 t. sweet ground paprika
- 2 T. fresh chopped parsley

Boil potatoes in salted water until tender (about 12 minutes). Drain potatoes.

Combine sour cream, egg yolk and cream. Add cream mixture into potatoes and mash until almost smooth.

While potatoes cook, preheat a large skillet over medium heat. Add olive oil and ground beef.

Brown and crumble meat for three to four minutes. Season with salt and pepper to taste. Add chopped carrots and onions to the meat mixture. Cook vegetables and meat, stirring frequently.

In a second skillet, cook butter and flour over medium heat for two minutes. Whisk in broth and Worchester sauce. Thicken gravy for one minute. Add gravy to meat mixture. Stir in peas.

Preheat broiler to high. Fill a small rectangular casserole dish with meat, vegetable and gravy mixture.

Spoon potatoes evenly on top of the mixture. Top potatoes with paprika and broil for six to eight inches from the heat until they are evenly browned. Top casserole with chopped parsley and serve. Enjoy!

Please share your delicious recipes with other MEUW readers. Contact Karen Whitmer at kwhitmer@meuw.org with questions or to submit a recipe.







Getting to Know Our

Wisconsin Officials

U.S. Representative Ron Kind

A native of La Crosse, Ron Kind has represented Wisconsin's Third Congressional District since 1997.

Ron is a member of the Ways and Means Committee, which has jurisdiction over tax policy, Medicare, Social Security and international trade. He serves on the Subcommittee on Health, and since becoming a member in 2007, Ron has focused his work primarily on issues relating to small business, specifically their health care challenges. Ron also serves on the Subcommittee on Trade.

Ron served as a member of the Natural Resources Committee from 1996-2010. His work on the committee allowed him to focus on a tremendously important issue to western Wisconsin – the Mississippi River. As a committee member and the co-chair of the Upper Mississippi Caucus, Ron worked hard to restore the river, combat invasive species, and ensure it remains a thriving resource for recreation and transportation. Ron is a graduate of La Crosse Logan High School. His success in academics and football there brought him to Harvard University where he earned a Bachelor's degree. Later, Ron earned a Master's degree from the London School of Economics and a Law Degree from the University of Minnesota.

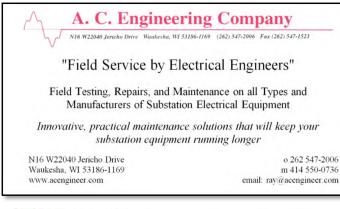


U.S. Representative Ron Kind (Representing Wisconsin 's Third District in the western part of the state).

Washington is still a weekly commute for Ron, as he and his wife Tawni live in La Crosse. They have two college-aged sons, Johnny and Matthew.







Visit MEUW.org

for the most up-to-date information and to register for MEUW training seminars and programs



Assess your cybersecurity vulnerabilities, risks

Like every industry, utilities are seeing increased activity from criminals looking to access customer data, expose sensitive information and infiltrate financial systems. They also face the responsibility of safeguarding the electrical grid from an attack that could leave customers without power for days or weeks, with potentially devastating consequences.

According to Michael Daniel, former cybersecurity advisor to President Barack Obama and president of the Cyber Threat Alliance, utilities of all sizes are at risk

for cybersecurity attacks. In his keynote speech at the American Public Power Association's (APPA) 2018
National Conference, he told attendees that while small utilities aren't expected to invest in the expertise and tools as sophisticated as larger investorowned utilities and corporations — they must do something to fight back.

"Wisconsin's public power providers are at varying places on their cybersecurity journeys," said MEUW Executive Director Tim Heinrich. "And one size doesn't fit all when it comes to cyber threat protection," he continued. "Each utility must find its vulnerabilities and take steps to manage and mitigate its own specific risks."

With the help of the Department of Energy (DOE), APPA is working to develop dedicated cybersecurity resources for public power providers. Some tools are available now, including the Public Power Cybersecurity Scorecard, which is based on the DOE Electricity Subsector Cybersecurity Capability Maturity Model (ES-C2M2).

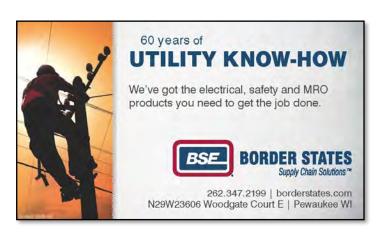
The scorecard serves as a practical first step for public power utilities that don't know where to start with cybersecurity. A dashboard displays assessment results, including the utility's current score, target score and milestone score.

It helps public power utilities understand their cybersecurity strengths and weaknesses, and it provides personalized recommendations on how to bolster security by implementing additional systems and processes. These scores are presented alongside benchmarks identified by APPA so a utility can see how it compares with peers.

The utility employee who completes the scorecard does not need to understand all aspects of security, but simply understand general operations and processes. It typically can be completed in about an hour.

The Public Power Cybersecurity Scorecard can be accessed on APPA's website at www.publicpower.org.

See related information on page 11







Cyber security tips for public power providers

While there is no easy checklist to ensure security for an



organization, these eight actions can have a positive impact on security.

- 1. **Designate a cybersecurity lead.** This person can help to establish cybersecurity protocols and manage information sharing.
- 2. **Assess your risk.** Evaluate your utility's cyber risks and vulnerabilities with a tool such as the Public Power Cybersecurity Scorecard.
- 3. **Train staff.** Anyone with access to the utility's systems should be regularly trained and get refreshers on cyber threats and protocols.
- 4. **Educate local officials.** Provide pre-incident outreach and education to local government officials.
- 5. **Monitor your networks.** If you don't have this capacity internally, consider hiring a third-party vendor to scan your networks and alert you when action is required.

- 6. Enroll in the Electricity Information Sharing and Analysis Center. The E-ISAC is a free service that keeps you alerted of threats and offers strategies to reduce vulnerabilities. Visit www.eisac.com for more information.
- 7. **Define an escalation protocol for cyber threats,** including:
 - Levels of potential escalation.
 - Triggers for escalation.
 - When and how to notify and report threats.
 - When and how to involve top-level governance stakeholders.
 - How to report to state and federal government regulators and industry coordinating bodies.
 - What duties to delegate to staff.
 - Report cyber threats appropriately. Let local government officials know about cyber threats and incidents without exposing sensitive information to other sources.

Source: Reprinted from APPA's Public Power Magazine, September 2018; visit www.public power.org/grid security for more information.

Focus on Energy hosts Utility Partners Forum

On Wednesday, Dec. 12, Focus on Energy is hosting a Utility Partners Forum. From 10 a.m. to 2 p.m., utility partners of the program are invited to join the Focus on Energy team in downtown Madison to learn about upcoming 2019 program changes and updates moving forward.

Utility colleagues are welcome to share ideas on how to improve their partnership with Focus on Energy to centralize the needs of customers. Lunch will be provided at this event.

To RSVP, click <u>here</u> or contact Lisa Lee at <u>lisa.lee@focusonenergy.com</u> for more information.

EVENT DETAILS

WHEN

Wednesday, December 12, 2018 10 a.m. – 2 p.m.

WHERE:

Focus on Energy
US Bank Conference Center, 1st Floor
1 S. Pinckney St.
Madison, WI 53711





Take advantage of MEUW pricing on MSDSonline

MSDSonline, a one-stop shop for all your hazard communications needs, is still available to MEUW member utilities at substantial savings.

If you were to sign up for MSDSonline on your own, it would cost \$2,700. However, by leveraging group buying power through MEUW, the cost is only \$977.32 for each of the 20 MEUW members already taking advantage of this deal. And for every community that signs up for MSDSonline through MEUW, the price will continue to drop.

As a reminder, the key benefits of MSDSonline include having access to:



- More than 12 million safety data sheets (SDS's) online.
- Automatic updates on all SDS's into GHS compliance (no more struggles keeping paper copies up to date!).
- An app so SDS's are readily available to employees via smartphones, tablets or computers.
- Primary and secondary container labels for all its products online.

If you are interested in signing up for MSDSonline through MEUW for 2019, please contact Mike Czuprynko at mczuprynko@meuw.org.



Register now for Webinars

An internet connection and a computer are all you need to educate your staff. Individual webinars are \$99 or sign up for a series at a discounted rate. Register today at www.PublicPower.org under Education & Events. Non-members can enter coupon code **MEUW** to receive the member rate.

- Community Outreach: Get Out to Get Known Dec. 4
- Raising Awareness of Public Power Series
 Workplace Harassment Prevention in the Field Dec. 5
- Electric Utility 101 Series (5 webinars):
 Exploring Electric Utility Regulations and Business Models Feb. 22

Recorded webinars are also available for purchase. Visit www.PublicPower.org under Shop.







REGULATORY News

APPA appeals FCC ruling on pole attachments

On Nov. 15, the American Public Power Association (APPA) filed a petition for review with the U.S. Court of Appeals for the District of Columbia Circuit challenging a recent Federal Communications Commission (FCC) declaratory ruling and order that the FCC said could help to remove regulatory barriers that inhibit the deployment of infrastructure necessary for 5G and other advanced wireless services.

Among other things, APPA argues that the FCC's actions exceed its statutory authority and pose significant risks to safe, secure and reliable electric utility operations.

At issue is a declaratory ruling and order adopted on September 26 and released on September 27 that may result in FCC pole attachment oversight and regulation of public power utilities, despite the explicit exemption



for public power in Section 224 of the Communications Act.

Under the ruling and order, the FCC could preempt state and local laws or requirements governing access to public rights-of-way (ROW) and publicly owned infrastructure within the ROW, including rates, terms or conditions of pole attachment agreements, using Section 253 (related to ROW) and Section 332 (related to wireless services) of the Communications Act.

MEUW's legal counsel, Anita Gallucci, has put together a paper to help explain what MEUW members should know about the Order. The

informational paper is available on MEUW's website.

MEUW will continue to follow this issue and provide updates as warranted. •

DOE official nominated to be FERC Commissioner

The Senate Energy and Natural Resources Committee on Nov. 27 voted to approve the nomination of Bernard McNamee to be a member of the Federal Energy Regulatory Commission for a term that would expire June 30, 2020.

The 13-10 voice vote was along party lines, other than Sen. Joe Manchin, D-West Virginia, who voted in support of McNamee.

On Oct. 3, President Trump announced his intent to nominate McNamee to be a member of FERC. McNamee is currently the Executive Director of the Office of Policy for the U.S. Department of Energy.



McNamee would fill the seat on the Commission vacated by Robert Powelson, a Republican, who left the Commission in August to

become President and CEO of the National Association of Water Companies.

McNamee's nomination still requires confirmation by the Senate.





New Lisbon Utilities - Journeyman Lineworkers

City of New Lisbon is accepting applications for two Journeyman Line workers. These are skilled positions in operating, maintaining, and constructing electric distribution, transmission, and substation systems. The City also operates and maintains its own generation system. Experience with municipal generators is a plus but not required. Minimum qualifications are to include graduation from high school, graduation from lineman vocational training program and a valid journeyman card. You must be able to acquire and maintain a Wisconsin commercial driver's license. These positions will require occasional after hours call outs and possible work in inclement weather. Knowledge of safety rules and good communication are a must. From time to time you may be needed to assist in other city departments. Starting wage for this position will be up \$42.00 per hour depending on qualifications and the City offers an excellent benefit package. Qualified applicants should submit a resume, including work history to: City of New Lisbon attn: Nick Wyss at 232 W. Pleasant Street, New Lisbon, WI 53950. We will accept applications until both positions are filled.

City of Lake Mills - Journeyman Electric Line Technician

\$31-33/hour plus excellent benefit package including employer paid medical insurance. Visit www.ci.lake-mills.wi.us/employment or email mquest@ci.lake-mills.wi.us for additional information. Position open until filled. EOE.

Southwest Wisconsin Technical College - Electrical Power Distribution Instructor

Click here for the job description and to apply

The Village of Pardeeville - Director of Public Works

Pardeeville is a community of 2096 and utilities consist of water, sewer and electric. Candidate will plan, organize, direct and supervise the Department of Public Works/Utilities. Functions includes streets, building maintenance, parks, storm sewer, sanitary sewer, water distribution, dam facilities, wastewater treatment, waste collection & recycling, contracted services, vehicle maintenance, weed commissioner, forester and other public works projects and programs. This is a full time job with excellent benefits. Salary is based upon qualifications and experience. Experience in a similar role or municipal setting of 3-5 years required; Bachelor's degree from an accredited university a plus. A combination of education and experience will be considered. Successful completion of a background check, physical, drug screening, alcohol screening and driver's license are required prior to being employed. An application and resume must be submitted to the Village of Pardeeville by December 13, 2018. Applications and full job description available at www.villageofpardeeville.net or by email clerktreasurer@villageofpardeeville.net.

Remember that MEUW welcomes the opportunity to help you attract qualified applicants to your utility's job openings. Send your open job postings to Info@MEUW.org whenever they become available. We will work to post your position in a timely fashion and also publicize it in the next issue of Live Lines (if the position is not filled before its monthly publication date).



Session A

COMMUNICATION, TIME AND PROJECT MANAGEMENT

February 27, 2019

Session B

EFFECTIVE SKILLS FOR LEADERSHIP AND TEAM BUILDING

June 5, 2019

Session C

UTILITY PLANNING AND RISK MANAGEMENT

October 16, 2019

Session D

UTILITY ACCOUNTING AND FINANCE

February 26, 2020

Session E

PERSONNEL ISSUES

June 3, 2020

Session F

CUSTOMER SERVICE AND PUBLIC RELATIONS

October 14, 2020

New Location:

Hotel Marshfield

Registration will open six weeks before each scheduled session





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May 15 –17, 2019

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Renewable Renewa

More Electric Cars Quietly Hitting the Road

It's been predicted and now it's happening: electric cars are going more mainstream.

Dozens of electric models are available at dealerships now: battery-only electric vehicles (EV); plug-in hybrids, which have both gas and electric engines with a battery charged by an external source; and hybrids that generate their own electricity.

Sales are increasing as purchase prices have come down and drivers are taking a closer look at the cost of ownership.

For example, in May 2018, a Nissan Leaf sold for about \$4,000 more than the nation's most popular compact car, the Honda Civic, when factoring in the federal income tax credit for electric vehicles – up to \$7,500 in 2018.

What do they cost to drive? A 2018 study from the University of Michigan found that **electric vehicles cost less than half as much to operate as gas-powered cars**. The average cost to operate an EV in the United States is \$485 per year, while the average for a gasoline-powered vehicle is \$1,117.

You can directly compare EV and standard vehicle costs using the US Department of Energy's eGallon tool, which compares the cost of driving a mile on electricity versus a mile on gasoline, depending on where you live and energy prices at the time.



 $Maintenance\ costs\ also\ can\ be\ lower.$

Electric-only vehicles don't require engine oil, spark plugs and timing belts.

Perhaps the most unexpected feature of current electric vehicles is their high performance, making them really fun to drive. They come with user-friendly dashboards and interiors, and offer quick acceleration, further helping to shed the negative perceptions drivers may have once had.

Through June 2018, Americans registered more than 123,000 new electric vehicles in the U.S., an increase of 35% from the first half of 2017 and more than double sales from three years ago.



Holidays With Less Waste

Trying to use less and reduce waste is an added challenge during the holidays. Americans typically generate 25% more trash between Thanksgiving and New Year's Eve, according to Vanderbilt University's Sustainable Holiday Greening Guide.

Consider gift-giving alone: Half the paper we consume is used to wrap and decorate.

What do you do in your home that saves energy or helps the environment? Submit your Sustainable Life Hack to renewablereport@wppienergy.org to be featured in the next issue. If your hack is chosen, you'll win a pack of LED light bulbs!

If every family in the U.S. wrapped just three presents in reused materials (like newspaper, brown paper, baskets, bags, tins or fabric wrappers), the paper saved would cover 45,000 football fields. And trimmings, too – if every family reused just two feet of ribbon, we'd save 38,000 miles of it, more than enough to wrap around the planet.

As for gifts,
making presents,
finding special
secondhand items,
shopping locally or
giving gift certificates
for local experiences are
all ways to give something special while
supporting your local community.



Cedarburg Light & Water is 1 of 45 utilities throughout Wisconsin, Michigan and Iowa that offer Choose Renewable through WPPI Energy. Together we support sustainable, green power for our communities.

CEDARBURG, WIS.

Cozy, quaint and historic, Cedarburg is 20 miles north of Milwaukee and near the shores of Lake Michigan, with a population of 11,400.

Early settlers arrived in the 1840s and built a series of mills and dams on Cedar Creek. The Cedarburg Woolen Mill, built in 1864, was the largest west of Philadelphia.

Today, a former grist mill has been care-

fully restored as Cedar Creek Settlement, home to some of the downtown's 70-plus shops. Starting in November, five Festive Friday Eves feature events at businesses beautifully decorated for the season - plus horse-drawn carriage rides, a live Nativity, concerts and a holiday film series at the Rivoli Theater.

After attending Cedarburg Christmas,



visitors can return for the Winter Festival, CedarBrew Fest, Strawberry Festival, Wine & Harvest Festival and Oktoberfest.

Cedarburg's residents and businesses are leaders in the Choose Renewable program. City participants purchase more than 53,000 kWh of renewable energy per month—equivalent to reducing the greenhouse gas emissions of 84 gasoline-powered cars.

PRSRT STD US POSTAGE PAID MADISON, WI PERMIT NO. 1121



READ THE RENEWABLE REPORT ONLINE

To receive this newsletter via email, contact us at **RenewableReport@wppienergy.org.**We also welcome your comments, questions or story ideas. Your e-mail address will be used solely for distribution of the *Renewable Report*.





Things You Should KNOW

Michael W. Peters, President & CEO

Monthly Wrap-Up for November 2018

Issued December 6, 2018

Things You Should Know is my monthly wrap-up for members of all things related to WPPI Energy. As always, I welcome your feedback. Hearing directly from you is critical to our ability to serve members. If you have any questions, comments or concerns, please contact me at 608-834-4557 or mpeters@wppienergy.org.

<u>December 14 Board Meeting: Has Your Director or Alternate Made Plans to Attend?</u> Earlier today we hosted a webinar to review in detail with members the proposed 2019 WPPI budget and rates. Thank you to all who took time to dial in. WPPI is member-owned and member-driven, and your engagement is important to ensuring that we remain on the right path to meet your community's needs.

We anticipate that the Board of Directors will take action during its December 14 meeting on the Executive Committee's recommendation for approval of the 2019 budget and rates. The meeting agenda will also feature an update from the member Outage Management Task Force, a discussion about suggested areas for members to consider in the design of their retail rates, some follow-up to the recently conducted member feedback survey, and staff reports from both Power Supply and Legal & Government Relations.

As in previous years, we will again offer the opportunity for participants to attend the board meeting either in person at our office and operations facility in Sun Prairie, or via videoconference from Crystal Falls. I highly encourage all members to ensure that their director or alternate attends.

<u>Electric Vehicles: Member Support and Local Incentives Available.</u> WPPI members have long recognized the potential for electric vehicles to help make better use of the grid's existing capacity, protect the environment, and control system costs for all customers. In 2018, we updated our initiatives to assist members who are interested in promoting EV market advancement, with efforts including:

- Assistance with **customer outreach** such as website content, other marketing materials, help with showcasing EV technologies at local events, and more.
- **Reimbursement to help members** install utility- or municipally owned Level-2 charging stations.

- **Financial incentives for customers** who install Level-2 charging stations.
- **Rate options** to help interested members make EV technology even more viable.

For members who wish to participate, WPPI will reimburse up to 50% of the cost of customer- and utility-owned chargers, with a maximum of \$5,000 per year through this initiative.

On a related note, if your utility has decided to add an EV to its fleet, keep in mind that WPPI now has Level-2 chargers available in its parking lot, which visiting members can access at no charge.



Level-2 chargers available in the WPPI parking lot.

For more information, please see the EV initiative materials referenced in this week's WPPI Weekly Digest email to members, or contact Program Manager Mike Hodges at 608-834-4566 or mhodges@wppienergy.org.

What Do Your Residential Customers Think? 2018 Survey Results. Support for member utilities on their customer engagement efforts is one of the priorities identified in WPPI's 2017-2021 business plan. This remains an area of ongoing focus for our joint action agency. We know that, as locally owned, not-for-profit utilities, our members have always been—by nature of their business model—strongly dedicated to taking great care of their customers. We also know that, the more customers are aware of and engaged in their local utility's resources and offerings, the more likely they are to be satisfied.

In light of advancements in technology and new communication options, it is important to understand how customer expectations and interests continue to change. In order to help members consider how they can best engage with today's customers, we conduct market research each year on one of three main customer segments: residential households, small and mid-sized businesses, and large businesses.

Earlier this year, WPPI conducted a residential customer feedback survey on behalf of interested member utilities. The study, administered by The Dieringer Research Group, collected roughly 900 completed residential customer surveys online and over the phone in 45 participating member communities. The objective was to measure:

- Overall satisfaction
- Awareness of and familiarity with local utility programs
- Preferred method for engaging with utilities
- Current attitudes about various industry topics

You can find a summary of the key findings in this week's Weekly Digest. Please feel free to share this recap with your utility staff and governing bodies. If your utility would like to communicate high-level results to customers, please contact WPPI. Our staff will assist you with customized content developed specifically for your customer audience.

Overall, satisfaction remains stable, and the value that residential customers ascribe to the service their utility offers has increased, from 60% when this survey was last conducted in 2015, to 65% in 2018. That's a statistically significant improvement. Member utilities received the highest ratings for reliability, trustworthiness, and being locally owned. Areas that residential customers identified for improvement included cost management, rate and bill payment options, and additional communication during outages.

We have developed an action plan based on these findings, and our staff will work with the Member Services Advisory Group on next steps. To see the action plan and/or the full survey results, please contact Kelly Davis at kdavis@wppienergy.org or 608-834-4587.

In 2019 we will participate in E Source's Small and Midsize Business Gap and Priority Benchmark Survey to help members assess what business customers in this segment identify as their most important needs and measure how successfully they feel their expectations are being met.

Staff Updates. As I reported in last month's *Things You Should Know* memo, in January WPPI will begin providing an Electric Distribution Construction & Maintenance Service to the member communities of Baraga and L'Anse. I am pleased to welcome to our team Dony Ison and Matthew Robison, who will join WPPI's staff on December 10 as Journeyman Lineworkers serving Baraga and L'Anse.

I am always open to suggestions and feedback from WPPI members. If you have any questions, comments or concerns about WPPI or the updates I have provided here, please don't hesitate to contact me at 608-834-4557 or mpeters@wppienergy.org.



POWER REPORT

December 2018

Wind Energy Center is Economically Smart and Climate Friendly

During a ribbon-cutting ceremony on June 29, staff from member utilities and WPPI Energy got a firsthand look at the 53 new turbines that will more than double the amount of wind energy that WPPI Energy purchases.

The event at the 132-megawatt Bishop Hill III Wind Energy Center in Henry County, Ill., marked the official opening of the facility that will be able to power as many as 46,200 homes and businesses and offset an estimated 414,800 tons of carbon dioxide annually.

"We began looking a couple of years ago at whether new renewable resources could be a cost-effective addition to our power supply portfolio," WPPI Energy President and CEO Mike Peters said at the event. "Of the dozens of proposals we received, Bishop Hill III Wind Energy Center rose to the top as a project that is projected to lower our wholesale costs to WPPI Energy members over the long term."

WPPI Energy signed an agreement to purchase power from Bishop Hill III through mid-2040, continuing a long-standing relationship with Invenergy, the developer of the facility, and the facility's majority owner, WEC Energy Group.

Invenergy, North America's largest privately held renewable energy company, also developed two other facilities from which WPPI Energy purchases power: Forward Wind Energy Center in Wisconsin and Nelson Energy Center in Illinois.

As part of an additional effort led by Andy Kellen, VP of Power Supply Resources at WPPI Energy, the Renewable Energy Certificates (RECs) generated by the project will be sold to several Illinois utilities. Kellen stated, "The unanticipated income will help keep energy affordable for member utilities and their customers."

Moving forward, WPPI Energy continues to explore new power sources. By 2021, solar power from another new resource, Point Beach Solar Energy Center, will come online. The generated power will further diversify WPPI Energy's power supply portfolio while also creating emissions-free power, lowering overall carbon dioxide emissions, and further reducing wholesale costs to customers.



From the President and CEO

The state of WPPI Energy is strong. Together, our 51 member-owner utilities have a reliable, affordable power supply, best-in-class programs and services, and an effective voice to advocate for local customers and the community.

We're not stopping here. In each of these areas, we are forging ahead and accomplishing new, forward-looking business priorities directed by our members. In one of our most notable developments, this summer we cut the ribbon for the 53-turbine Bishop Hill III Wind Energy center. Like our other new resources, Bishop Hill III adds

FROM
THE CEO

Michael W. Peters
President/CEO

diversity to our generation portfolio, reduces the nation's carbon dioxide emissions, and—most importantly—reduces our long-term costs.

When it comes to costs, stability and competitiveness are always our focus. We've held average wholesale power costs steady over the past five years, and we expect our costs to be slightly lower over the five years to come. We remain highly competitive among wholesale electric suppliers in the state and continue to make solid gains in this area.

These steady and predictable rates are the result of WPPI Energy's long-term planning model. By fore-casting decades into the future, member utilities are at a significant advantage over utilities that are only planning for today's rates.

Our financial health is strong as well. We are reducing debt and maintaining our strong credit ratings. In April, we refinanced \$47 million of our 2008A bonds for a savings of \$6.5 million, which we pass directly to members. In July, we paid off another \$15.2 million in 2008A bonds early, delivering additional rate reductions to members now through 2020.

Competitive costs aren't our only priority. We also provide cost-effective support to help members deliver the modern, updated services, rates, technologies and online communications that customers increasingly expect, and we actively engage with policymakers to ensure the laws and regulations they put in place take into account member utilities' local needs and priorities.

These accomplishments demonstrate the benefit of 51 like-minded communities working for a common purpose. WPPI Energy members are strong because we stand together as a unified membership.

Together, we are ready to serve and succeed as utilities of the future.



WPPI Energy is a regional, not-for-profit power company serving 51 locally owned electric utilities. Through WPPI Energy, these public power utilities share resources and own generation facilities to provide reliable, affordable electricity to 200,000 homes and businesses in Wisconsin, the Upper Peninsula of Michigan and Iowa.

Member Spotlight: Hartford, Wisconsin

The kind of growth that the city of Hartford has experienced over the last four decades requires a strong pro-business environment - and as a public power utility, Hartford Electric has enabled that environment to thrive.

Since 1980, the population of the southeastern Wisconsin city has doubled, from 7,159 to 15,384. At 60 MW, Hartford has the third-largest load of all WPPI Energy members.

Customers include large industrial customers such as Quad/Graphics, a commercial printing company that employs more than 1,000 people, Broan-NuTone, which manufactures household products including doorbells and range hoods with over 800 workers, Signicast, which specializes in precision casting and employs 800-plus, and Hartford Finishing, the largest industrial powder coater in Wisconsin, with 500 employees.

"At the City of Hartford, we provide a great advantage over some of our comparable communities when attracting new businesses because we provide our own electric utility," said City Administrator Steve Volkert. "Through our partnership with WPPI Energy, we provide a more reliable electrical service with local, personal service, which is vital to highly automated manufacturers."

Responsive to the Community

Hartford Electric Director Brian Rhodes has witnessed the city's steady expansion since he started working as a lineman there in 1993. He worked as a journeyman lineman for 10 years before moving into management and taking on the role as director eight years ago.

"Linework is fun; it's challenging yet rewarding. But moving into management is equally as rewarding. It gives you an opportunity to look at the electric industry in a different light – pardon the pun - to look at some of the challenges that the industry has faced and be part of



Downtown Hartford

that solution to find ways to make it work better, more efficiently," Rhodes said.

Hartford Electric has seven linemen and two utility technicians - former meter readers who now help the line crew with low voltage work. The finance department at city hall handles all billing. Mike Thimm is the utility superintendent and Mike Gentry is the utility's energy services representative.

While reliability and low cost are significant benefits, Hartford Electric customers receive even greater value with the services and support available through a locally owned and operated public power utility. "Hartford Electric has one main purpose and that is to provide customers with the best services at the lowest possible cost. Community ownership and control is the hallmark of public power — local people working together to meet local needs," Gentry said.

"Providing great customer service is an important part of that responsibility. Hartford operations and billing personnel are quick to respond with friendly and helpful service. For my part, I help foster this energy partnership by working

Continued on page 4...



HARTFORD FAST FACTS

Counties: Washington and Dodge Number of electric customers: 7.500 **Utility website:**

www.hartfordelectric.org

Did you know?

- The city was originally settled in 1844, when the city's first businessmen bought 40 acres on the Rubicon River and built a dam across the rapids, harnessing the power for a sawmill.
- · Ludwig "Louis" Kissel and his sons established several businesses in Hartford beginning in the 1890s, including the Kissel Motor Car Company, which operated until 1930 and later switched to making outboard motors.







Hartford, Wis.

Hartford, continued from page 3...

directly with the customers to improve how energy is used at their facilities."

Hartford Electric is proactive in promoting the statewide energy efficiency program Focus on Energy as well as local programs offered directly through WPPI Energy and the utility. One example of this is when the utility worked with Quad Graphics, Broan NuTone, Signicast and Menasha Packaging on Strategic Energy Management (SEM), a Focus on Energy initiative. Gentry is a member of each company's energy team and is driven to help find savings through the efficiency. In fact, these four Hartford customers are among the original 30 SEM leaders who helped pave the way for other businesses across the state to achieve significant savings as well.

On the municipal side, Hartford Electric helped the city secure assistance through WPPI Energy's New Construction Design Assistance program for the Jack Russell Memorial Library and the city hall/police station. To promote energy efficiency at the city recreation center, the utility donated 100 indoor TLED lamps and provided incentives for new LED outdoor parking area lights to replace energy intensive HID lighting. The utility is also

exploring LED options for street lighting with support from the city.

Economic development remains a constant focus, with Hartford Electric providing not only financial contributions but also expertise to organizations such as the Hartford Area Economic Development Corp. and the Downtown Hartford Business Improvement District.

Strength through Public Power

Hartford has a solid history of championing public power. This spring, Mayor Timothy Michalak demonstrated his support at the American Public Power Association Legislative Rally in Washington, D.C.

"Our utility has grown significantly since I first started. Over this time period, we have made significant changes to how we complete our jobs. We reduced our staff size and now complete most jobs without the use of contractors. As a result, we have to purchase more equipment and the Utility Committee and Common Council have been very supportive."

Hartford has a unique partnership with fellow WPPI Energy member community Slinger. The relationship between the two utilities began when Hartford needed a location for another substation, and it happened to be in Slinger's service territory. That led to a joint venture to build the substation there, with Slinger also using the transformer to supply their customers. In addition, Hartford provides lineworker staffing through a shared operating agreement. "We're able to offset costs on both sides," Rhodes said.

Rhodes serves as the utility's representative on the WPPI Energy Board of Directors, and Thimm is a member of the Distribution Services Advisory Group (DSAG).

"It gives us the opportunity to say what would work out in the field and a voice in what services are really needed at the utility," Rhodes said. "There's a lot of time spent internally here in my office talking about the best way to serve our customers and the most efficient way to do that."

In fact, during a recent rate adjustment, residential rates went down.

"The utility and the city are both very customer-focused," Rhodes said. "The goal is to provide benefit to everybody, not just shareholders, and that really does make a difference here."

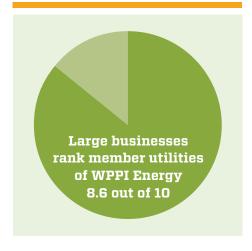
Large Businesses Report Strong Satisfaction with Utility Service

Strong local businesses make for healthy communities, and that's why WPPI Energy member utilities make it a priority to serve them well.

The utilities' efforts are valued, with large business customers rating them highly on several key measures:

- WPPI Energy members tied for first place for overall satisfaction with the utility, with a score of 8.6 out of 10, along with American Electric Power Ohio and Snohomish County Public Utility District in Everett. Wash.
- · Member utilities ranked fourth for overall business customer satisfaction and value.
- · Members ranked third for overall utility account representative satisfaction and value.
- Finally, members rated in the "overperform" category for being active in their communities.

These insights come from a survey regularly conducted by E Source, an experienced research and consulting firm, on behalf of WPPI Energy and 11



other publicly owned utilities nationwide. E Source surveyed 1,300 large business customers to conduct its 2017 Large Business Gap & Priority Study, with the purpose of identifying "gaps," "or opportunities for improvement.

Key drivers of satisfaction for large business customers include reliability, keeping costs down and providing energy cost management resources. WPPI Energy members have the most significant opportunities in the areas of keeping energy costs down, reliability, communicating during emergencies and offering a variety of rate options, the survey found.

When asked about service from their utilities' Energy Services Representatives (ESRs), large business customers gave ESRs a score of 50.6, compared to a benchmark average of 47.5. That's up from 45.3 in 2014.

What drives satisfaction with ESRs? Communicating when appropriate, being attentive to needs, being trustworthy, providing reliable energy and being easy to reach. Opportunities exist in communicating during emergencies and understanding business' needs and challenges.

Watch for more information about the survey results that will be provided directly to members in the near future. WPPI Energy will use this information to review Energy Services best practices and develop a report to share the findings with large business customers.

For questions about the survey results, contact Jake Oelke at: joelke@wppienergy.org.

Sales Tax Exemption Can Offset Energy Costs

Manufacturers across Wisconsin, Iowa and Michigan may quality for an exemption on the sales tax applied to energy used for manufacturing.

As part of the service that Energy Services Representatives provide, they make companies aware of these tax benefits and offer assistance with metering or energy estimates

In Wisconsin, fuel and electricity considered "consumed in manufacturing" or used to operate machines and equipment used directly in the step-by-step manufacturing process may be eligible for a sales tax exemption. For more information and to complete an exemption certificate, see www.revenue.wi.gov/Pages/ FAQS/ise-exemptn.aspx.

Iowa manufacturers can be exempt from sales and use tax on fuel consumed in processing or agriculture. "Fuel" includes, but is not limited to, heat, steam, electricity, gas, water or any other tangible personal property consumed in creating heat, power, steam, or for generating electric current. To apply for an exemption, go to www.state.ia.us/tax and search for "energy."

Businesses in Michigan may be eligible for a sales tax exemption on their energy bills. This includes 501(c)(3) organizations, customers involved in agricultural production and manufactures purchasing and consuming fuel and/or electricity in industrial processing. For more information and to apply for exempt status, visit www.michigan.gov/taxes/0,1607,7-238-43529-154427-,00.html.

MEMBER NEWS

Annual Meeting Awards Ceremony

WPPI Energy member utilities gathered on Sept. 13 for the Annual Meeting. One highlight of the program was during the Awards Ceremony, which honored individuals for contributions to their utility and community. Below is a recap of award recipients:



Community Service Award

Mike Steffen, New Holstein Glen Falkenthal, Hustisford Lionel "Snick" Schlump, Boscobel David Siefkes, Richland Center

Distinguished Service Award

Ted Chase, Sun Prairie Don Baumann, Hustisford

Shining Star Award

Wayne Siverling, River Falls Troy Murphy, Prairie du Sac

Individual Achievement Award

Mike Noreen, River Falls

Volunteer Power! Award

Kevin Westhuis, River Falls Grace David, WPPI Energy

Utility Leadership Award

Sturgeon Bay Utilities





River Falls Ranked 5th Nationwide for Green Power Participation

Customers of River Falls Municipal Utilities (RFMU) have once again earned national recognition for their renewable energy leadership over the past year.

The Department of Energy's National Renewable Energy Laboratory (NREL) evaluated the renewable or 'green' power programs of utilities in four categories and released lists of the top 10 utilities across the nation. RFMU ranked fifth among all utilities in the U.S. for Green Power Participation, and seventh in the nation for Green Power Sales.

The Green Power Participation Rate measures the percentage of customers who participated in a utility's renewable or 'green' energy programs. In 2017, 10% of RFMU customers participated in RFMU's Choose Renewable voluntary renewable energy program.

The Green Power Sales Rate compares the ratio of a utility's renewable energy sales to total sales. In 2017, the Choose Renewable program accounted for 3.95% of RFMU's sales.

Muscoda Utilities

Muscoda Utilities Ranked 9th Nationwide for Green Power Participation

Customers of Muscoda Utilities (MU) have also earned national recognition for their renewable energy leadership in 2017. MU ranked ninth among all utilities in the U.S. for Green Power Participation.

In 2017, 6% of MU customers participated in the utility's Choose Renewable voluntary renewable energy program, which offers customers an affordable option to buy 300-kilowatt hour (kWh) blocks of energy generated from sustainable resources, such as wind, solar and biogas.

Nine WPPI Member Utilities Receive RP3 Award

The American Public Power Association's (APPA) Reliable Public Power Provider (RP3) designation was awarded to nine members of WPPI Energy on April 30 at the APPA Engineering & Operations Technical Conference in Raleigh, N.C. RP3 is a nationally-recognized honor that distinguishes utilities that maintain the highest standards of reliability, safety, workforce development and system improvement. Criteria include sound business practices and a utility-wide commitment to the safe and reliable delivery of electricity.

RP3 Award Winners

Diamond Level

Kaukauna Utilities
Oconomowoc Utilities
City Utilities of Richland Center
Stoughton Utilities
Two Rivers Water & Light

Platinum Level

Evansville Water & Light Menasha Utilities River Falls Municipal Utilities

Gold Level

Cedarburg Light & Water Utility

19 WPPI Member Utilities Receive **National Safety Award**

The American Public Power Association's (APPA) Safety Award of Excellence was awarded to 19 members of WPPI Energy on April 30 at the APPA Engineering & Operations Technical Conference in Raleigh, N.C. The award recognized utilities with the lowest number of workrelated injuries and illnesses in 2017. based on worker-hours of exposure.

National Safety Award Winners

Black River Falls Municipal Utilities

Brodhead Water & Light

Columbus Water & Light

Evansville Water & Light

Independence Light & Power, Telecommunications

Lodi Utilities

Menasha Utilities

Muscoda Utilities

New Holstein Utilities

New Richmond Utilities

Oconomowoc Utilities

Reedsburg Utility Commission

River Falls Municipal Utilities

Stoughton Utilities

Sturgeon Bay Utilities

Sun Prairie Utilities

Two Rivers Water & Light

Waupun Utilities

Whitehall Electric Utility

WPPI ENERGY POLICY **UPDATES**

Wisconsin

Democrat Tony Evers unseated incumbent Republican Scott Walker by a 1.1% margin on Wednesday, Nov. 7, and he will assume the office in Jan. 2019. Incumbent U.S. Sen. Tammy Baldwin defeated GOP challenger Sen. Leah Vukmir by an 11-point margin and Democrats won all other statewide contests for Lt. Governor, Attorney General, Treasurer and Secretary of State.

Governor-elect Evers focused primarily on education, health care and infrastructure during his campaign, but indicated strong support for renewable energy, energy independence and affordable electricity.

Michigan

Democrat Gretchen Whitmer defeated Republican Bill Schuette by a 10-point margin in Michigan's gubernatorial election and will become the next state governor in Jan. 2019. Current GOP Gov. Rick Snyder was termlimited and could not run. Incumbent U.S. Sen. Debbie Stabenow defeated GOP challenger John James by a 6-point margin.

Governor-elect Whitmer has indicated that she is committed to entering Michigan into the U.S. Climate Alliance. She campaigned on infrastructure, health care and clean water, and is a strong supporter of carbon emission reduction and implementing safeguards to ensure clean air and water for everyone in Michigan.

Iowa

Incumbent Republican Gov. Kim Reynolds won re-election, beating Democrat Fred Hubbell 50-48. She was Lt. Governor before former Gov. Terry Branstad was appointed Ambassador to China in 2017, and becomes the first woman to be elected Governor in Iowa's history. Gov. Reynolds' energy policy priorities include expanding natural gas and biomass, and maintaining Iowa's place as a national leader on renewable energy and biofuels.

In Iowa's first congressional district, Democrat Abby Finkenauer defeated Republican incumbent Rod Blum to be the Representative-Elect. Together with Cindy Axne, they became the first women from Iowa elected to the U.S. House of Representatives. Rep. Finkenauer will represent all three WPPI Energy Iowa members in Washington, D.C.

Finkenauer has stated she will be a voice for common sense policies that protect both air and water.



1425 Corporate Center Drive Sun Prairie, WI 53590-9109 Ph: (608) 834-4500 www.wppienergy.org

Stronger Together: Cyber Security



Ben Slager, Director of Information Technology,

Protecting the security of the power grid is a constant priority for WPPI Energy members. Now, a new program available to member utilities through WPPI Energy will expand upon services aimed at cyber security.

Members who choose to participate in the Cyber Security Service can add layers of protection, including next-generation firewall security, anti-phishing campaigns intended to improve staff awareness of malicious emails, and advanced end-point protection on personal computers.

"By working together through joint action, we can help members stay ahead of security-related tasks at a competitive cost," said Ben Slager, Director of Information Technology with WPPI Energy. "Through consistent, proactive measures, we can help member utilities find peace of mind."

The new service includes supplying and licensing all firewall hardware, software and subscriptions required. It also includes upgrading hardware and software as needed, downloading new firewall signatures weekly and alerting members of critical issues, should any arise.

Member utilities of WPPI Energy already have access to several key security support functions, such as a traditional firewall and antivirus protection, end-user training, email spam filtering, cyber asset inventories, and data backup configuration.

Member utility managers and staff who serve on the Member Services Advisory Group (MSAG) offer important insights and advice to WPPI Energy on the services that would provide the most benefit - leading to new programs like the Cyber Security Service.

Slager shared that, "As with the services we've provided for years, the Cyber Security Service can be tailored to each community's particular needs, with ongoing support to make sure all utility staff are getting the full value out of each service."



Serving Electric, Water & Wastewater Since 1886

News Release Stoughton Utilities

FOR IMMEDIATE RELEASE January 2, 2018

Contact: Brian Hoops, Assistant Utilities Director

Stoughton Utilities LED Light Exchange and Personal Essentials Pantry Drive a Success

Stoughton Utilities took their energy efficiency efforts one step further this past holiday season, offering utility customers a "bright" reward for charitable donations to the Stoughton Personal Essentials Pantry. The Personal Essentials Pantry helps families in Stoughton with household essentials that are not provided at the food pantry, including toilet paper, body wash, toothbrushes, and more.

Utility customers in Stoughton were encouraged to donate to the local personal essentials pantry to support the increased need of local residents during the holiday season. Stoughton Utilities' customers could receive a new string of LED holiday lights and an outdoor light timer with a donation of four items to the Personal Essentials Pantry.

This year, the program distributed strands of new energy efficient LED holiday lights and outdoor holiday light timers to 239 customers, and collected over 1,400 items for the Stoughton Personal Essentials Pantry. Stoughton Utilities also donated an additional \$750 to the Stoughton Personal Essentials Pantry, and \$750 to the Stoughton Food Pantry from its Community Contributions fund.

"During the holiday season there is an increased need for donations to help local residents, and our customers have the opportunity to be leaders in Stoughton by assisting those in need," Stoughton Utilities Assistant Director Brian Hoops said.

Compared to standard incandescent holiday lights, LED lights offer several advantages. LED lights are more efficient, using 99 percent less energy, and are safer and last longer than standard holiday lights. LED lights produce almost no heat and do not have the same components that cause traditional lights to burn out or combust. "Through this promotion, our utility customers saved energy and helped their neighbors have a happier holiday season," said Hoops. "It's the type of win-win situation that we love to see, and the outpouring of support says a lot about the generosity of this community."



Sharon Mason-Boersma (center) from the Stoughton Personal Essentials Pantry accepts a donation from Erin Goldade and Brandi Yungen of Stoughton Utilities.

###

Founded in 1886, Stoughton Utilities serves electric customers in Stoughton and the surrounding area; and wastewater and water customers in Stoughton.



- Dew Stoff.

Thank you so very much for the wonderful devotion of personal Essential items that are so appreciated for helping those in need. Our volunteers of customers at PEP of Stoughton are so grateful for your time + efforts in making this Imation possible. Them so much for all you have done in Support of PEP + this comminity sorvice.

Sincerely,

Volunteers + Customers of PEP- Strighton



NOTICE TO ELECTRIC CUSTOMERS OF STOUGHTON UTILITIES

Stoughton Utilities has been authorized by the Public Service Commission of Wisconsin to charge the following rates for service effective April 1, 2017.

Rg-1 – Residential Service

Single Phase Monthly Customer Charge	. \$12.00
Three Phase Monthly Customer Charge	. \$19.00
Energy Charge	. \$0.1012 / kWh

Rg-2 – Residential Time of Day Service (Optional)

Single Phase Monthly Customer Charge	\$12.00
Three Phase Monthly Customer Charge	\$19.00
Energy Charge: On Peak	\$0.1842 / kWh
Off Peak	\$0.0500 / kWh

Gs-1 General Service

Single Phase Monthly Customer Charge	. \$16.00
Three Phase Monthly Customer Charge	. \$22.00
Energy Charge	\$0.1044 / kWh

Gs-2 General Service Time of Day Service (Optional)

Single Phase Monthly Customer Charge	\$16.00
Three Phase Monthly Customer Charge	\$22.00
Energy Charge: On Peak	\$0.1842 / kWh
Off Peak	\$0.0500 / kWh

The **minimum monthly bill** is the customer charge.

Rate schedules for the following are available at the Utilities office:

CP-1 Small Power

CP-1 Small Power Optional Time of Day

CP-2 Large Power

Cp-3 Industrial Power

All rates will include a power cost adjustment (plus or minus) which reflect Stoughton Utilities current wholesale cost of purchased power.

Late Payment Charge is 1% per month of any unpaid balance.

For a list of On Peak hours for the Residential and General Service Time of Day Rate option, please see the rate schedule available at the Utilities office.

Stoughton Utilities 600 S. 4th St. / P.O. Box 383 Stoughton, WI 53589-0383 Phone: 873-3379

www.stoughtonutilities.com

NOTICE TO WATER CUSTOMERS OF STOUGHTON UTILITIES

Stoughton Utilities has been authorized by the Public Service Commission of Wisconsin to charge the following rates for service effective October 1, 2018.

GENERAL SERVICE: Monthly Service Charge

5/8"	\$9.00	1 1/2" \$21.00
3/4"	\$9.00	2" \$30.00
1"	\$13.00	3" \$50.00
1 1/4"	\$17.00	4" \$75.00

VOLUME CHARGE: Cost Per 1,000 Gallons Used

^{**}Commercial customers follow the below tiered rates:

First 10,000 Gallons	\$2.54
Next 90,000 Gallons	\$2.36
Next 3,900,000 Gallons	\$2.00
Over 4,000,000 Gallons	\$1.55

PUBLIC FIRE PROTECTION: Monthly Charge, changes annually

A monthly charge based on meter size is also charged to customers to recover the water system costs related to the ability to provide public fire protection.

5/8"	\$7.60	1 1/2"	\$38.00
3/4"	\$7.60	2"	\$61.00
1"	\$19.00	3"	\$114.00
1 1/4"	\$28.00	4"	\$190.00

Late Payment Charge is 1% per month of any unpaid balance.

NOTICE TO WASTEWATER CUSTOMERS OF STOUGHTON UTILITIES

Stoughton Utilities has been authorized to charge the following rates for service effective January 1, 2015.

GENERAL SERVICE: Monthly Service Charge

5/8"	\$7.32	1 1/2"	\$17.75
3/4"	\$7.32	2"	\$25.58
1"	\$11.23	3"	\$43.84
1 1/4"	\$13.84	4"	\$69.93

VOLUME CHARGE:

Cost per 1,000 gallons of wastewater discharged......\$4.93

High Strength Wastes: Charges for non-residential strength wastewater are available in the rate structure available at the Utilities office.

Late Payment Charge is 1% per month of any unpaid balance.

Stoughton Utilities 600 S. 4th St. / P.O. Box 383 Stoughton, WI 53589-0383 Phone: 873-3379 www.stoughtonutilities.com

^{**}Residential customers for all water used - \$2.82 per 1,000 gallons

What if you have a complaint?

If you have a dispute regarding electric, gas or water service, the PSCW can help:

Did you contact your utility to resolve the dispute?

• Both you and the utility must make reasonable attempts to resolve a dispute



No?

 Contact the utility using its contact information included with the bill or notice



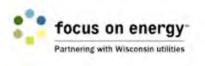
Yes?

• You may contact PSCW Consumer Affairs to try to resolve the issue

Conservation & Moving

If you would like information on conservation or are expecting to move to another location, contact your utility. The utility can provide estimated energy costs at the new location, in the form of average energy used or the largest and smallest bills in the last twelve months. As another note on conservation, it is recommended that water heater thermostats be set no higher than 125° Fahrenheit.

For more information on conservation, go to FOCUSONENERGY.COM or call: 1-800-762-7077



About Us

The Public Service Commission of Wisconsin (PSCW) is an independent regulatory agency dedicated to serving the public interest. The agency is responsible for the regulation of Wisconsin public electric, gas and water utilities, including those that are municipally-owned, since 1907. The PSCW works to ensure that, in the absence of competition, adequate and reasonably priced service is provided to utility customers.

Contact Us

Phone (Local/Toll Free)

General: 608-266-5481 / 888-266-3831 Consumer Affairs: 608-266-2001 / 800-225-7729

Web

http://psc.wi.gov

You can also Log a Complaint Online at: http://apps.psc.wi.gov/pages/complaint.htm

En la Comisión de Servicios Públicos del estado de Wisconsin (PSCW) podemos ayudarle en español. Cuando llame a la PSCW, simplemente indique que quisiera servicio en español, y conectaremos a un intérprete a la línea.



PUBLIC SERVICE COMMISSION OF WISCONSIN P.O. BOX 7854 MADISON, WI 53707-7854

Updated: (04/2018)



Utility Customer Bill of Rights

Your Rights as a Residential Electric, Gas, or Water Utility

Customer

Disconnections

A utility can disconnect your service for:

- Nonpayment
- Default on a deferred payment agreement
- Nonpayment of a deposit
- "Name switching" on an account where a customer did not pay their bill and continues to reside at that address
- Tampering with utility equipment
- Safety hazards or other emergencies
- Failure to provide access to a meter or utility-owned equipment

A utility must:

- Send you notice before disconnection (except where there is a safety hazard or self-reconnection)
- Include the reason(s) for disconnection, ways to contact the utility, and the dispute procedure on the notice

Winter Disconnection Rules

If a utility service provides the primary heat source to your home or impacts the primary heat source to your home (for example, water or steam radiators), a utility cannot disconnect that service from November 1st through April 15th. Before winter, the utility must attempt to contact customers whose service was disconnected for nonpayment. Utilities are also required to check the customer's well-being, attempt to negotiate payment plans, and inform the customer about any special assistance available to avoid disconnection.

Medical or Protective Services Emergencies

If a disconnection will aggravate a medical or protective services emergency, the utility may delay service shut-off for up to 21 days. The utility may require documentation from a professional involved with the medical emergency or crisis. Contact your utility about any such special circumstances.

Deposits

Utility companies may require a deposit for service to ensure payment. A standard deposit cannot exceed the sum of the two largest consecutive bills during the last twelve months. A deposit requested due to nonpayment during the winter months cannot exceed the four highest consecutive bills during the last twelve months. The following rules apply to payment and refund of deposits:

Existing Residential Customer

- Deposits can be requested if:
- your service was disconnected during the last 12 months for nonpayment of an undisputed account or your initial application was falsified or incomplete.

Winter Moratorium

- •Deposits can be requested if:
- you had debt incurred during the winter (November 1st through April 15th) that was 80 days or more past due and you had the ability to pay.

New Residential Customer

- Deposits can be requested if:
- you have an unpaid bill for utility service anywhere in Wisconsin during the last six years which remains outstanding.

Low Income Customer

• You do not have to post a deposit if you can document that your income is at or below 200 percent of the federal poverty guidelines. Please contact your utility, Energy Assistance, or the PSCW for additional information on low income resources.

For residential service, the deposit will be refunded, with interest, after 12 consecutive months of prompt payment.

Budget Billing & Deferred Payment Agreements (DPAs)

To manage high winter gas bills or high summer electric bills, ask your utility about budget payment plans. This allows you to average estimated annual use into even monthly payments. Every six months, your payment amount is readjusted to reflect your actual use. At the end of a budget year, your bill is adjusted to correct over-billing or under-billing.

You may also request a deferred payment agreement (DPA) to pay a current or past due balance. A DPA consists of a down payment on the balance and installment payments toward the remaining balance negotiated between you and your utility depending on your situation. If the installment payments are not paid, the utility may disconnect your service. Municipal utilities may not be required to offer a DPA to some customers.

Delinquent Bills Levied as a Tax or Lien

Under state law, some delinquent municipal utility bills may be transferred as a tax to the property tax bill of the property owner or as a lien on tenant's personal assets.

Meter Readings

Generally, meter readings are based on actual meter readings by the utility or the customer. If a utility cannot read your meter, a customer does not provide a reading, or there is an emergency, you may receive an estimated bill. The PSCW requires electric and gas utilities to read your meter at least once every six months and when there is a change of customer. You must allow utilities to perform meter readings or your service can be disconnected.



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

Serving Electric, Water & Wastewater Since 1886

Date: January 8, 2019

To: Stoughton Utilities Committee

From: Brian R. Hoops

Stoughton Utilities Assistant Director

Subject: Status of the Utilities Committee recommendation(s) to the Stoughton Common

Council

The following items from prior Stoughton Utilities Committee Meeting(s) were presented to and/or acted upon in closed session by the Stoughton Common Council at their January 8, 2019 meeting:

Business:

1. Hiring of the Utilities Director position

2. Real estate purchase and sale agreement from Junction 138, LLC for the purchase of the vacant land located at 3201 McComb Rd

The following items from prior Stoughton Utilities Committee Meeting(s) were presented to and/or acted upon by the Stoughton Common Council at their December 11, 2018 meeting:

Consent Agenda:

- 1. Stoughton Utilities Committee October 15, 2018 Meeting Minutes
- 2. Stoughton Utilities Payments Due List Report
- 3. Stoughton Utilities September 2018 Financial Summary
- 4. Stoughton Utilities September 2018 Statistical Report

Business:

1. None

The following items were presented to and/or acted upon in closed session by the Stoughton Finance Committee at their November 27, 2018 meeting:

Business:

1. Real estate purchase and sale agreement from Junction 138, LLC for the purchase of the vacant land located at 3201 McComb Rd



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

Serving Electric, Water & Wastewater Since 1886

Date: January 8, 2019

To: Stoughton Utilities Committee

From: Brian R. Hoops

Stoughton Utilities Assistant Director

Subject: Selection of the Utilities Committee meeting date and time

Subsection 2-527 of the Stoughton Municipal Code of Ordinances requires that the Stoughton Utilities Committee select the date and time for the regular monthly meeting. This selection shall occur at the first regularly scheduled Utilities Committee meeting following the Stoughton Common Council Reorganization Meeting, which was held on April 17, 2018.

At its May 14, 2018 meeting, the Utilities Committee set its monthly meeting date as the Monday after the first regularly scheduled meeting of the Stoughton Common Council, with the regular meeting time of 5:00 p.m.

This date allows the committee's recommendations to receive timely action at the second bimonthly meeting of the Common Council. This monthly meeting date also generally does not conflict with normally scheduled meetings of other Stoughton committees or commissions. However, this meeting time has sometimes posed challenges for Committee members that work outside the City of Stoughton and have to leave work and travel in evening commuter traffic to attend the meeting.

It is requested that that the Stoughton Utilities Committee designate the monthly meeting date to remain as the Monday after the first regularly scheduled meeting of the Stoughton Common Council, and that a meeting time be selected that allows for all members to attend the monthly meetings.



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

Serving Electric, Water & Wastewater Since 1886

Date: January 8, 2019

To: Stoughton Utilities Committee

From: Brian R. Hoops

Stoughton Utilities Assistant Director

Subject: Stoughton Utilities Water & Wastewater Billing Credits Policy

At its October 15, 2018 meeting, the Utilities Committee received an inquiry from a customer regarding wastewater billing credits following the customer receiving a bill for service while watering their lawn. During the discussion that followed, reference was made to Stoughton Utilities' existing policy on issuing water and wastewater billing credits. It was requested by the committee that this policy be brought to a future meeting for discussion and possible action.

The Water & Wastewater Billing Credits policy was last updated in February 2002, and covers when billing credits are provided to customers for indoor and outdoor water leaks, and intentional outdoor usage for purposes such as filling pools and landscaping.

To summarize the existing policy, Stoughton Utilities does not issue wastewater billing credits unless there was a plumbing system failure that resulted in water leaking in a manner that did not result in the water being discharged into the sanitary sewer collection system. All intentional water usage is billed at our standard established water and wastewater rates unless metered separately.

The full policy is provided on the following page.

It is staff's recommendation that the Stoughton Utilities Committee reaffirm the existing Water & Wastewater Billing Credits Policy.

16. Water & Wastewater Billing Credits

- 16.1 There will be no credit issued to customers in the event of a metered water leak in which the water is discharged into the sanitary sewer collection system and processed through the Wastewater Treatment Facility. Customers will be charged using our established rates based on their actual metered usage.
- 16.2 The only instance in which a wastewater credit will be issued for a water leak is when SU management determines that a water leak did occur after the water meter, and the water did not discharge into our sanitary sewer collection system (outside hose leaks to the back yard, water leaks in basement and there is no floor drain, etc.).
 - In this event, we will use the customer's monthly historic data to determine what their normal use is, and an adjustment will be made to reduce the wastewater charges. However, no water use adjustment will be made.
- 16.3 No credits will be issued for customers who use their regular meter for filling swimming pools and hot tubs, or for lawn and plant watering. Instead, these customers have the option to pursue the installation of a sewer exempt meter at their expense. With a sewer-exempt meter, the customer is only charged for the water used. These meters are for situations for where used water does not discharge into our sanitary sewer collection system.

No other exceptions to this policy shall be made by Stoughton Utilities staff.



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

Serving Electric, Water & Wastewater Since 1886

Date: January 8, 2019

To: Stoughton Utilities Committee

From: Brian R. Hoops

Stoughton Utilities Assistant Director

Subject: Stoughton Utilities Round-Up Program

On February 20, 2006, the Stoughton Utilities Committee approved the Round-Up Program to allow our customers to easily support local charities and organizations that benefit the Stoughton community. Under this voluntary opt-in program, enrolled customers agree to "Round-Up" their utilities bill to the next highest dollar amount. Each of the current 330 program participants will contribute an average of \$6.00 per year to the Round-Up program fund, which is awarded by the Stoughton Utilities Committee bi-annually.

On July 14, 2008, the Stoughton Utilities Committee established the following qualifying criteria: Qualifying applicants include individuals providing community service, community service organizations, organizations providing disaster relief, educational organizations, organizations providing service to youth, and advocates for the environment. Such applicants must apply or reapply annually in writing, and applicants may only be eligible as a recipient once each calendar year.

At the start of each Round-Up program year, Stoughton Utilities staff distributes organization application forms to qualifying applicants from the prior program year and past funding recipients. In an effort to expand the pool of funding candidates, in 2017 we began sending application forms to additional non-profit organizations that may not have previously applied for program funding. In 2016, eight organizations submitted program applications, with that number increasing to 20 applicants in 2017, and 17 applicants in 2018. An additional 15 eligible organizations were mailed application forms in 2018, but chose to not apply. Staff is planning to send program application forms to a total of 34 organizations for the 2019 program year.

Qualifying applications for funds collected during the 2018 calendar year are enclosed from the following candidates:

Dane County Humane Society FolksWagons, Inc. * Friends of Badfish Creek

Friends of Lake Kegonsa * PEPartnership * Stoughton Affordable Transportation *

St. Vincent de Paul St. Vincent de Paul-St. Ann Conference Stoughton Area Resource Team *

Stoughton Food Pantry Stoughton Lacrosse Stoughton Police Dept. Safety Camp

Stoughton Senior Center Stoughton United Methodist Food Pantry Stoughton Village Players

VSA Wisconsin, Inc.

It is requested that the Stoughton Utilities Committee donate \$1,000 from the 2018 SU Round-Up Program fund to the applicant of your choice at the January 2019 meeting.

^{*} indicates recipient of Round-Up funds in a prior calendar year

Past recipients of Round-Up Funds include:

June 18, 2007	Friends of the Stoughton Area Youth Center	\$1,000
December 14, 2007	Friends of the Stoughton Area Youth Center	\$550
January 14, 2008	Shalom Holistic Health Services	\$550
June 16, 2008	American Legion Post 59	\$1,100
December 15, 2008	Stoughton Wellness Coalition	\$1,100
July 20, 2009	Martin Luther Christian School	\$1,100
February 15, 2010	Friends of the Stoughton Area Youth Center	\$1,100
June 15, 2010	Stoughton Lions and Lionesses Clubs	\$1,100
December 20, 2010	Stoughton Wellness Coalition	\$550
	Stoughton Holiday Fund	\$550
June 20, 2011	American Cancer Society Relay For Life	\$600
	Friends of the Stoughton Public Library	\$600
	American Legion Post 59	\$600
January 16, 2012	Stoughton Holiday Fund	\$1,500
July 16, 2012	Stoughton Area Resource Team, Inc. (START)	\$1,100
January 14, 2013	American Legion Post 59	\$1,100
July 15, 2013	Friends of the Stoughton Public Library	\$1,100
January 21, 2014	Stoughton United Ministries	\$1,100
June 16, 2014	Stoughton Area Resource Team, Inc. (START)	\$900
January 20, 2015	Folks Wagons, Inc.	\$1,200
July 7, 2015	PEPartnership	\$1,000
January 19, 2016	River Bluff Middle School – Trees for Tomorrow	\$1,000
July 18, 2016	Stoughton Area Resource Team, Inc. (START)	\$1,000
January 17, 2017	PEPartnership	\$1,000
July 17, 2017	Friends of Lake Kegonsa Society (FOLKs)	\$1,000
January 16, 2018	Eyes of Hope Stoughton, Inc.	\$1,000
July 16, 2018	Free Health Clinic	\$1,000

Total: \$25,500

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MAY 18 2018

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600 South Fourth Street • PO Box 383 • Stoughton, WI 53589 stoughtonutilities.com • (608) 873-3379

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Organization Name: Dane County Humane Society Phone #: 608-838-0413 x167
Survivales Address: 5137 Vaces Rd. Madison WI 53718
Name of Individual Submitting Application: Ash Collins, Donor Relations Special ST acollins@give shelter.or
Are you a non-profit organization?
Type of Request: Personal Group Community
How will the funds be used? Funds donated to Dane County Humane Society
will help us rare for the over 9,000 annals that need our core each year.
Finds could also support our programs in our education program, Sheltering Animals
of Abuse Victias program, and wildlife program that cares for sick, injured, and
urphaned Wisconsin wild life.
C DCIIC would benefit
What are the benefits to the Stoughton Community?
the Staughten Community by providing core for honeless animals in their
area, providing programs and services to members of the community.
and coring for their sick, injured, and orphoned wildlife to
protect their environment.
The state of the s
What other information would you like to share? Thank you for consideration! Lock
forward to hearing from you!
Applicant Signature: Date: 5/19/18
Applicant Signature: Date:

STOUGHTON UTILITIES



JAN 22 2018

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600 South Fourth Street • PO Box 383 • Stoughton, WI 53589 stoughtonutilities.com • (608) 873-3379 Serving Electric, Water & Wastewater Since 1886

Organization Name: FOLKS WAGONS INC Phone #: 608 576 -7003
Organization Address: 1567 WILLIAMS DR STOUGHTON, WI 53589
Name of Individual Submitting Application: Seeved Zarth + Jeff Zarth
Are you a non-profit organization? Yes No
Type of Request: Personal Group Community
How will the funds be used? WE DONATE CORS AND CAR
MAINTENANCE + REPAIRS TO THOSE IN NEED IN
THE STOUGHTON SCHOOL DISTRICT, WE RECEIVE
REFERRALS FROM THE STOUGHTON SCHOOL DISTRICT,
STOUGHTON AREA RESOURCE TEAM SENIORS IN NEED +
What are the benefits to the Stoughton Community?
WE HELP THOSE IN NEED IN THE STOUGHTON
COMMUNITY HAVE SAFE TRANSPORTATION TO
WORK SCHOOL & DOCTOR APPOINTENTS.
, ,
What other information would you like to share? Thank You For
YOUR ASSISTANCE IN THE PAST. WE JUST
GAVE AWAY DUR 70TH CAR TO A WOMAN IN NEEL
YOUR HELP IS GREATLY APPRECIATED.
Applicant Signature: Sunda Tarth Date: 1/19/18
Applicant Signature: Date:



600 South Fourth Street • PO Box 383 • Stoughton, WI 53589 stoughtonutilities.com • (608) 873-3379 Serving Electric, Water & Wastewater Since 1886

Organization Name:	on Name:		Phone #:	
Organization Address:				
Name of Individual Submitting Applic	cation:			
Are you a non-profit or	ganization?	Yes	No	
Type of Request:	Personal	Group	Community	
How will the funds be used?				
What are the benefits to the Stought	on Community?			
What other information would you lil	ke to share?			
Applicant Signature:	Post		Date:	
Applicant Signature:			Date:	



MAY 29 2018



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600 South Fourth Street • PO Box 383 • Stoughton, WI 53589 stoughtonutilities.com • (608) 873-3379 Serving Electric, Water & Wastewater Since 1886

Application for Funds from RoundUP Program Donation

Organization Name:	Friends of Lake Kegonsa Society (FOLKS)		Phone #:						
Organization Address:	PO Box 173								
Name of Individual Subm	nitting Application:	Connie Hagen, Treasurer and Board Member							
Are you a non-profit organization?		Yes_	~	No					
Type of Rec	quest: Persona	Group_	~	Community					
How will the funds be used? To improve water quality in Lake Kegonsa by reducing phosphorous, a major contributor to algae growth. 1) Carp removal- Working with DNR and commercial fishermen, subsidize removal of 1,000,000 lbs of carp over 5 years. 2) Runoff project- To identify property that allows direct runoff into the lake & develop specific plans to reduce sediments coming into the lake. Educate members/community about shoreline runoff and potential solutions such as rain gardens and shoreline gardens.3) Door Creek- work on clean water initiatives and educate members/public about the importance that high phosphorous in Door Creek has to Lake Kegonsa.4) Leaf Management- Educate community about the negative impact phosphorous from leaves has on our lake and propose solutions for better managing leaves. What are the benefits to the Stoughton Community? FOLKS primary objectives are: To protect, maintain and enhance environmental and recreational values at Lake Kegonsa and its surroundings. To organize and conduct activities intended to maintain, or improve the ecology, water quality, fishing and recreational use of Lake Kegonsa. To obtain and provide educational information about Lake Kegonsa.									
What other information would you like to share?									
		formation on FOLKS pro	ojects.						
Applicant Signature: Applicant Signature:	Cornigs	Hagen_	Date: _	5/5/18					

Leaf Management



FOLKS is working to educate our members and others in the community about the negative impact phosphorus that comes from leaves has on our lake. Proper handling of leaves can reduce up to 80% of the phosphorus making it into our lakes from leaves.

In 2017 FOLKS initiated a three prong approach to help manage leaves around Lake Kegonsa with a grant from the Yahara Watershed Improvement Network:

Education: We had educational articles published in Township and FOLKS newsletters and local newspapers: The Thistle and The Hub. We mailed educational materials about leaf management to homeowners around the lake. We also provided yard signs to remind people to keep leaves out of the street.

Expanded compost site hours: We were able to work with the Town of Pleasant Springs to expand the hours at their compost site.

Leaf Pickup: FOLKS worked with the Town of Dunn and the Town of Pleasant Springs to pick up leaves for the very first time.

Town of Dunn - FOLKS helped to financially support the Town's pilot leaf vacuum program with yard signs, mailings and paid for pick up at 150 homes.

Town of Pleasant Springs - FOLKS offered leaf bags, yard signs and actual leaf bag pickup by FOLKS volunteers to approximately 150 homes as part of the pilot program.

What is FOLKS?

Friends of Lake Kegonsa Society, Inc (FOLKS) is a non-profit 501(C) (3) organization established in 1988. FOLKS primary objectives are:

- To protect, maintain and enhance environmental and recreational values at Lake Kegonsa and its surroundings.
- To organize and conduct activities intended to maintain, or improve the ecology, water quality, fishing and recreational use of Lake Kegonsa.
- To obtain and provide information to members regarding lake users concerns about Lake Kegonsa and its surrounding watershed.

This brochure provides an overview of some of the many projects that FOLKS is involved in. FOLKS membership is a nominal \$20/year and we hope you will help us continue our efforts with your membership.

Visit our website - WWW.KEGONSA.ORG for membership forms and important lake information.



Friends of Lake Kegonsa Society (FOLKS)



Friends of Lake Kegonsa Society Inc. (FOLKS) is pleased to report that because of our member support we had a very successful year in 2017. We were able to expand our activities and strengthen our organization.

Please help us again in 2018 by becoming a member of FOLKS. Your support will allow us to continue our efforts to improve the conditions of Lake Kegonsa.

Please take a moment to read how your lake association works for you.

Friends of Lake Kegonsa Society, Inc. P.O. Box 173 Stoughton, WI 53589

WWW.KEGONSA.ORG

FOLKS Carp Removal Project

Benefit of removing carp

Shallow lakes, like Lake Kegonsa, with dense populations of carp normally have poor water clarity from the resuspended sediments stirred up by the carp as they forage for food. It has been demonstrated in other lakes that removing carp can have the following benefits.

- Water clarity improves
- Native aquatic plant growth, like native grasses, increases
- Invasive aquatic plant growth, like Eurasian Water Milfoil, decreases
- Other fish populations improve

Lake Kegonsa project

It's impossible to predict the exact impact removing carp will have on Lake Kegonsa, but FOLKS believed it was worth trying to help our lake by moving forward with a major carp removal project.

This is the largest project FOLKS has been involved in during our 30 year history. We are working closely with Dane County and the Wisconsin Department of Natural Resources on this challenging project.

Our Goal

Our goal is to remove 200,000 lbs of carp each year for the next five years for a total removal of I million lbs of carp from Lake Kegonsa. If the market for selling carp is good the commercial fishermen have an incentive to fish for carp.

If the market is poor, or even fair, FOLKS will pay the fishermen part of the cost/lb to make the removal profitable for them. Remember, the commercial fishermen want to make money from the removal and we just want the carp removed, regardless of the market price. We are projecting that this effort could cost FOLKS over \$50,000, during the five year program.

Results in 2017

After inserting radio transmitters into 20 carp and then tracking their movement for 17 months via airplane, boat and ATV we were ready to start the actual removal in March of 2017.

In 2017 the commercial fishermen removed 111,000 lbs of carp from Lake Kegonsa. Some of the carp were sold live and some were processed for food products such as gefilte fish or for animal feed. FOLKS paid the commercial fishermen \$1,108 to help supplement the market price of the carp.

In 2017 FOLKS received an additional \$5,000 grant from the Bryant Foundation for our carp project, and our FOLKS members have generously added donations over and above their dues. We will continue to raise money each year to complete this project properly.

Water Monitoring

FOLKS members volunteer their time to monitor Lake Kegonsa and other waterways. Samples are taken at least weekly throughout the summer from several locations around Lake Kegonsa, including the deepest part of the lake. Our volunteers are measuring data such as water temperature, clarity, dissolved oxygen and information about algal blooms, and even the presence of ducks and geese.

FOLKS members also sample and record data at a number of sites on Door Creek which flows into Lake Kegonsa.

We are helping to build a scientific database of measurements for Lake Kegonsa, Door Creek and other waterways to further the clean water efforts.

Fish Camp County Park

In 2017 FOLKS adopted the park and initiated a number of projects.

Picnic Tables: FOLKS volunteers replaced and painted all of the boards in the six picnic tables at the park.

Aquatic Tour: Working with the Dane County Land and Water Resources Dept. we conducted a kayak and canoe, educational aquatic tour in Door Creek and the Yahara River.

Demonstration Garden: FOLKS

volunteers worked to design and get County permits to install a shoreline garden to demonstrate how native plants can be used to help reduce runoff into the lake.

Approximately 20 varieties of plants, bushes and grasses were then planted in the garden. The project was completed with donations form Dane County and a grant from the Stoughton Utilities RoundUp program

Future Involvement: If we have the money, FOLKS would like to help renovate the original historic 1937 corn and equipment buildings that were used during the carp seining operation from the 1930's until 1954.

Which plants did we choose? Continued

Grasses:

Little Bluestem (Schizachyrium scoparium)
Prairie Dropseed (Sporobolus heterolepis)

Shrubs:

Winterberry (*Ilex verticillata*)
Gray Dogwood (*Cornus racemosa*)

FOLKS prepared a notebook for this garden site that includes information on shoreline buffers and native plantings. It contains pictures and information on native species planted in the garden.

Shoreline after planting in September 2017:



Other References:

UW-Extension – Shoreline Stewardship Series *uwsp.edu/cnrap/UWEXLakes/Pages/ecology/shor eland/background.aspx*

UW Aboretum – arboretum.wisc.edu

Dane Co Office of Lakes and Watershed –
olw-lwrd.countyofdane.com

Dane Co Water Resources Dept -

Native species wred-lwrd.countyofdane.com and waterfront landscapes ripple-effects.com/#waterfront

What is FOLKS?

Friends of Lake Kegonsa Society, Inc. (FOLKS) is a non-profit organization established in 1988. FOLKS' primary objectives are:

- To protect, maintain and enhance environmental and recreational values at Lake Kegonsa and its surroundings.
- To organize and conduct activities intended to maintain, or improve the ecology, water quality, fishing and recreational use of Lake Kegonsa.
- To obtain and provide information to members regarding concerns about Lake Kegonsa.

We work closely with Dane County, the Department of Natural Resources, and the Clean Lakes Alliance to monitor our lake conditions and represent our members' interests. We focus on water quality and water levels. We have a group of volunteers that monitor the lake for clarity and take water samples for quality analysis on a regular basis. This allows us to build a scientific data-base of measurements for Lake Kegonsa.

For important lake information and to learn how to join **FOLKS**, please visit our website at: **www.kegonsa.org**

Thank you again to Stoughton Utilities
RoundUP grant program for making this
shoreline garden possible.



Friends of Lake Kegonsa Society, Inc. P.O. Box 173 Stoughton, WI 53589-0173

Shoreline Garden - Native Plants Fish Camp County Park Lake Kegonsa

The Friends of Lake Kegonsa Society (FOLKS) installed a small shoreline planting area at Fish Camp County Park for the public to enjoy. Our purpose is to demonstrate how native plants can be effectively used to prevent run-off into the lake, add color and interest, and attract butterflies and birds to the park.

Shoreline before the Garden



Why plant a shoreline garden?

Shoreline gardens help protect the water quality in our lakes. Planting native plants along a shoreline helps keep nutrients from the soil from going into the lake during periods of heavy rain. The root systems of the native plant garden form a more effective buffer for nutrient absorption than lawns. Water soaks into the ground gradually in the planted area. A mown lawn can allow 7 times more phosphorus and 18 times more sediment to enter the water than a natural shoreline.

Phosphorus is a naturally occurring nutrient in our lake but excess phosphorous can cause algae blooms. Algae blooms not only look and smell bad but they can be toxic. Algae blooms may reduce oxygen levels in the water harming fish and other aquatic species.

Runoff water may include phosphorous, nitrates and other chemicals in excess fertilizers, herbicides, and insecticides from both agricultural lands and residential areas. Storm water running off of lawns and driveways can pull soil, fertilizers, pesticides and pet waste directly into the waterways.

Why use Native Plants?

Native plants are adapted to the local climate and soils, are drought tolerant, and disease resistant. Once established, native plants require very little care. A shoreline buffer of native plants provides plant cover and natural food for pollinators, birds and

other wildlife but it may also keep Canada geese from coming up onto your shore.

A buffer strip also greatly reduces soil erosion and the effects of runoff from driveways, roofs and roads. The buffer strip filters polluted runoff that would otherwise run directly to the lake.

The FOLKS Garden:

Volunteers from **FOLKS** are responsible for planning the garden, coordinating site preparation, planting, mulching, watering and weeding. We had generous support from the Stoughton Utilities RoundUP program to fund our garden. The Dane County Parks Department approved our initial site plan, helped us with site preparation and provided the mulch. The "Plant Dane" program donated 130 native plants.

The garden plot at Fish Camp County Park is $^{\circ}62' \times 2'-8'$. We initially planted 150 native plants:

- 2 native bushes.
- 140 native flowering plants (15 species),
- 8 native grasses (2 species)

To prepare the garden area,

- Dane County Parks eliminated the grass with an aquatic-safe herbicide (rather than remove the grass) so that the roots would keep the soil in place.
- We covered the area with thick red rosin construction grade paper to reduce weeds and dug a small trench

- around the garden to keep the mulch in place.
- We planted bushes, flowering plants and grasses by digging the appropriate sized holes, setting in the native plant and watering thoroughly.
- We covered areas around the native plants with wood chip mulch provided by Dane County Parks to further reduce weeds.
- Plant labels with the common and scientific names were added to identify the native plants. Labels also contain information on height and bloom time.

Which plants did we choose?

We selected plants that are native to Wisconsin and would attract pollinators, birds and butterflies for this demonstration garden. There are many other beautiful native plants to choose from.

Forbs (Broad-leaved herbaceous plants):

Arrow-leaved Aster (Aster sagittifolius)
Black-eyed Susan (Rudbeckia hirta)
Blue Vervain (Verbena hastate)
Columbine (Aquilegia Canadensis)
Foxglove (Penstemon digitalis)
Golden Alexanders (Zizia aurea)
Grass leaf goldenrod (Solidago graminifolia)
Marsh Milkweed (Asclepias incarnate)
Mountain Mint (Pycnanthemum virginianum)
Pale Purple Coneflower (Echinacea pallida)
Sneezeweed (Helenium autumnale)
Spotted Bee Balm (Monarda fistulosa)
Yellow Coneflower (Ratibida pinnata)



FEB 02 2018

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5 1-6 1-10	Phone #: 1008-576-5657
Organization Name:	
Organization Address: 348 E Main St., St	rughton WI 53589
Name of Individual Submitting Application:	huh
Are you a non-profit organization?	Yes No
	roup CommunityX
How will the funds be used? Stoughton Persona	1 Escentials fantry offers
the escentials of personal + hous	schold products to all people
is and pagemoniments local	tood partries 4 tood share
vincame by possiding essential	items not covered with
Good Stamps, PEP is hoping to	add a Saturday dispersem
to our Scholare. PEP	Stoughton directly impacts the
a mounty by providing for	their basic human needs. It
is the only place to receive	items such as: toilet paper,
deoderant, shampoo + conditioner	Soap laundry detergent,
diapers etc. free of charge.	The number of people
below the owerty level continu	es to increase in Stoughton.
What other information would you like to share?	is run completely by
volunteers and run solely or	
made by our community.	
made by our asire	
Applicant Signature: Panula a Johnh	Date:
Applicant Signature:	Date:
- 171	

STOUGHTON UTILITIES



JAN 22 2018

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	1 Vin t	de Poul	Phone	#: 608-442-7200 x405
Organization Name:	St. Vincent	aeloui		
Organization Address:	2033 Fis	h Hatheryl	W. Madi	son W1 53711
Name of Individual Sub	mitting Application:	Nancy	Hansis	
Are you a non-profit organization?		1?	Yes	
Type of Re	oquoot.	ersonal	107	Community
How will the funds be u	used? 51.	Vincent de	Bul pr	olides needed
programn	ringand su	pport to D	one Cours	ty neighbors in need, gest), a chentable
We operated	basishe -	for women	and child	Iren + men's housing.
phermacy	, nousing	10. 10077.0.		V
			towalton	residents come to
What are the benefits	to the Stoughton Comm	numey:		Fall briege clothe
St. Vinent	de leu to	r needed So	er nces 40	feed house, clothe
and recei	ve free me	dications it	they an	e uninsured ! living
in povert	4. Our Stol	ughton Thri	ft Store	gives tree clitting of
home for	mishings to	people in	need. Stur	g ton Utill ties will
be listed i	n our Annu	al report	as e su	prorting organization.
	on would you like to sh			
		11953		
Applicant Signature:	many	WHansi	0	Date: 3 18, 2018
Applicant Signature:				Date:

JAN . 8 2018

STOUGHTON, WI

January 15, 2018

Stoughton Utilities Stoughton, WI 53589

Dear Brandi,

Enclosed find an application for the Stoughton Utilities Round-Up program. I received the application information from Father Randy Budnar, our pastor at St Ann parish.

St Vincent de Paul St Vincent de Paul, St Ann Conference, is an organization of volunteers who visit and help our neighbors in need. All the funds we receive are used to help people in need in the Stoughton Area School District regardless of race, creed, or social status.

If you have any questions, please call me and I will be happy to provide any additional information. I have included my contact information below.

Thank you for considering our application and may God bless you.

Sincerely,

Tom McGinnis, President

72/M. Ami

St. Ann Conference of the St. Vincent de Paul Society

Ph: 608 213-1194

Email: mcginnis1@charter.net



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	St. VINCENT de V	2.1 ST. 1	Phone :	*: 873-76	33
ganization Name:	JI VANCENT LIE Y	0 0		100 5358	9
ganization Address:	323 N. VAN	BYREN, S	DUGHTON.	(0. # 1 25	2 - 0 12 - 1101
ıme of Individual Subr	nitting Application:	THOMAS	MICGINA	15 (PH 608	-213 117
Are you a	non-profit organization?		Yes	No	_
Type of Re	quest: Person	al	Group	Community	-
ow will the funds be u	sed?				
(SEE	ATTACHED)				
					-
that are the benefits t	o the Stoughton Communit				
What other informatio	n would you like to share?				
Applicant Signature:	19M.			Date:	-18
Applicant Signature:	·			Date:	

How will the funds be used?

St Vincent de Paul, St Ann Conference, is an organization of volunteers who visit and help our neighbors in need

All the funds will be used to help people in need in the Stoughton Area School District. We provide assistance with rent, utilities, emergency housing, medical, and other basic expenses. We make sure they are aware of all the resources available to them: furniture/clothing at our store, food pantries, county resources, etc. Our checks are never given directly to the clients but sent directly to whoever is owed the money.

What are the benefits to the Stoughton Community?

Any funds we receive would allow us to help more of the poor and needy in the Stoughton Area School District and in some cases prevent evictions or the shutoff of utilities. Based on the amount of requests we receive our treasury can get quite low at times and that severely limits the amount of help we can provide. Any amount you can give us would be greatly appreciated.

What other information would you like to share?

All funds we receive go directly to help people in need. The small amount of administrative costs we have are borne by our members.

Updated name and contact info 12/4/2018 Stoughton Affordable Transportation Program 1525 N Van Buren St, Stoughton Sharon Mason-Boersma 608-279-7613

STOUGHTON UTILITIES



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Organization Name:	Stoughton	United Ministr	iles Phone	#: 608-873-6112	
Organization Address:	010 525 Line	oln Ave. Stor	ghton, WI	53589	
Name of Individual Subr	mitting Application:	Sharon m	ASON-BOEL	25mA	
Are you a	non-profit organizatio	on?	Yes	No	
Type of Re	quest:	Personal	Group	Community	
How will the funds be us	sed? <u>The</u>	funds will be	used towar	d expenses incu	ired
to operate The Affe	rdable Trans	portation Prog (ATP) current	ly under the um	brella of
Stoughton Uni	ted Ministr	ies. Ihis progra	me Was esta	blished in helpin	re people in
Coordinator assi	ans rivers	to talk trans	ots, in the Ci	ty + to/from mac	ison. A paid
the local food	January in	JOURNAM T IN	MID. IN ING		0 + 000
What are the benefits to	the Stoughton Com	nunity? The grant f	undo would	splan of the ATP	coordintor -
The Affordable T	ransportal	n Programes by	elps those i	who do not have	a means to
	0.01			portunities, legal	,
needs, Since	Stoughton 1	los no transit	therappets. A	illated to basic	living and
1700 30000	The second				ford the storight
The goal +	mussionof	this program	is to help s	tabilize families.	· individuals
What other information	would you like to sha	enhance their	quality of.	living.	
We would like &	to see the serie	ces of the ATP	grow with	in the mext year	by increasing.
Services for Stou	those whee	of to madisin C	fothers rec	ence their GED c	r higher Education
KIN SOME BALLON	urtation,	nun Hosp, for s	specialized !	heath heeds wh	o qualify and
Applicant Signature:		havon Mason-Bo	Devs MA Dat	e: <u>A/20/2018</u>	
Applicant Signature:		o-President	Dat	e:	

Who to Contact

Call Richard @ 873-6112

between the hours of 9am and 5pm

if no answer, leave a message

For transportation to the United Methodist Church Food Pantry, call 873-3273

For transportation to the City of Stoughton Food Pantry, call 873-8103 STOUGHTON UNITED MINISTRIES 525 LINCOLN AVE. STOUGHTON WI 53589

AFFORDABLE TRANSPORTATION PROGRAM



STOUGHTON UNITED MINISTRIES

Providing safe, confidential transportation solutions for qualified Stoughton residents.

www.stoughtonunitedministries.com



STOUGHTON UNITED MINISTRIES

We understand that there are times when you are in need. It is our desire to help you during that time.

We urge you to call us.

873-3273 for information about Stoughton United Minsitries and other resources in the community

This program is supported by:
Dane County
City of Stoughton
START Program
Area Churches
Stoughton Community
Foundation
Stoughton Utilities
and others

HOW THIS WORKS
Persons call 873-6112 (our coordinator) and are qualified through an intake process. There is NO CHARGE FOR THIS SERVICE, BUT DONATIONS ARE APPRECIATED Our drivers are all volunteers. They all pass a background check and a motor vehicle driving record check.

OUR DRIVERS ABIDE BY A
CONFIDENTIALITY AGREEMENT CALL RICHARD @ 873-6112 TO SIGN UP, GET QUESTIONS ANSWERED OR TO VOLUNTEER

All first time inquiries require an application process to determine eligibility.

Ride requests require a 48 hour advance notice, if possible.

Additional riders need prior clearance if at all possible.





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RECEIVED STOUGHTON, WI

Application for Funds from RoundUP Program Donation

Organization Name:	SToughton Area Resource Team (START)	Phone #:	608-577-5650
Organization Addres	s: 248 W. Main St., Stoughton, WI 53589		

Name of Individual Submitting Application: Cindy Thompson, START Program Director

608-577-5650, startofstoughton@gmail.com

Are you a non-profit organization? YES (EIN 41-2076251)

Type of Request: Personal ___ Group _X__ Community ___

How will the funds be used? The funds will be used to meet the critical human needs of individuals and families by serving as a safety net for those in crisis in the Stoughton Area School District under the age of 55. We do this through coordinating assistance with other organizations (churches, government, and social services), advocating on behalf of those in need and offering direct financial assistance when all other sources have been exhausted. Direct financial assistance is typically offered in partnership with other agencies and is done through voucher payments directly to landlords, health care providers, utility companies etc.

What are the benefits to the Stoughton Community? START provides a community service by providing a place to "start" when a family has an unexpected "bump" in the road such as unemployment and/or loss/reduced health insurance coverage and assists in preventing potential eviction or foreclosure. START has become a primary provider of housing assistance and housing case management services in the Stoughton Area School District. We are proud of the positive outcomes in working with households to prevent evictions and help individuals and families connect with the resources they will need in the future. As of October 2017, START served 337 individuals/families with office or home visits; 59 of those were new clients. We were able to help 164 individuals/families financially totaling \$37,988. The need for help continues to rise throughout our community and we have seen a significant growth in clients served over the past few years. With your support and others we have been able to prevent homelessness through rental assistance to 89 families. The numbers have continued to rise and grow as we collect the remaining data for 2017.

What other information would you like to share? A critical component of START's success is focused on case management services. Cindy Thompson, START Program Director, builds a focused case management program for households engaged in eviction prevention. For individuals and families that come to START with multiple barriers to achieving stable housing, case management becomes the "glue" that holds a plan together. The service plan or "plan" is the tool that is used to overcoming barriers and achieving stability, and reaching intended goals. Case management includes a detailed assessment and plan that always includes steps for immediate stabilization. This plan requires full participation by the client and an understanding that they are responsible and accountable for this plan throughout the case management process. The plan that is developed includes both immediate and long term action steps and goals. Outlined in the plan are resources that would be helpful in goal achievement. A plan to prevent eviction and stabilize future housing includes a rent budget and involves the landlord and may require a referral for budget counseling or payee services for getting and staying on track. Employment, transportation, and health are all possible issues that may present over time as barriers to achieving stability and meeting goals. The plan is then modified and updated as needed with input from the client.

See attached "2016 Annual Report" that highlights START's accomplishments and recognizes partners and donors.

Applicant Signature: Umtheoi & Thompson Date: 1/17/18



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Organization Name: Gty of Staughten tool Party Phone #: 873-8103
Organization Address: 520 S. Fourth St.
Name of Individual Submitting Application: Kelli Krcma
Are you a non-profit organization?
Type of Request: Personal Group Community
How will the funds be used?
Funds will be used to purchase Rood and other
essential items to distribute to people in need in
our community, including the elderly and Children.
, D O
What are the benefits to the Stoughton Community? Met the basic held of
Community members.
What other information would you like to share?
What other information would you like to share:
Applicant Signature: Date: 11118



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Organization Name: Stoughton lacrosse Phone #: 608 - 438-3084
Organization Address: 2363 Jackson St. Stoughton, W1 53539
Name of Individual Submitting Application: Tonya Wiches
Are you a non-profit organization?
Type of Request: Personal Group Community
How will the funds be used?
lacrosse in Stayarton. For many local youth, the
cost of equipment (helirets, pads, etc) creates a major.
barrier we are seeking frends to purchase
each year to ease the financial burden.
What are the benefits to the Stoughton Community?
Youth sports teach kids the importance of
teamwork, sportsmanshup, respect and work
ethic They also help kids to feel like they
are active participants in our community,
we want them to have the apportinisty to
find out if lacrosse can be that type of experience
What other information would you like to share?
1 1 0
Applicant Signature: Date: 12 19 17
Applicant Signature: Date:

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Арр	olication for Funds fr	om RoundUP Pi	ogram Donation	
Organization Name:	STOUGHTON	PD SAFETY S	Axe 873-33	74
Organization Address:	32) 5 4	THIST		
Name of Individual Submi	tting Application:	DET	DOMENS	
Are you a no	n-profit organization?	Yes	No	
Typs of Requ	ıest: Personal	Group	CommunityX	
How will the funds be use			· JAZRTS, PRIZZS, C	
SAFKTY O			EMENTALYSUNDLI BND ADOPT HRA	
) 				PS.
	***************************************		S HMMLK OF ZÓ)8 ATZO .	:
Applicant Signature: Applicant Signature:	acco		Date:	_

STOUGHTON UTILITIES



JAN 1 0 2018

STOUGHTON, WI

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Serving Electric, Water & Wastewater Since 1886 Application for Funds from RoundUP Program Donation **Organization Name:** Organization Address: Name of Individual Submitting Application: No Are you a non-profit organization? Yes Organ. municipa Community Type of Request: How will the funds be used? What are the benefits to the Stoughton Community? What other information would you like to share? Date: Applicant Signature:

Applicant Signature:

Date:



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Serving Electric, Water & Wastewater Since 1886

Organization Name: Stoughton United Methodist Food Pant Prione #: 608-873-3273
Organization Address: 525 Lincoln Que. Stoughton, W1 53589
Name of Individual Submitting Application: Schwass - Long
Are you a non-profit organization? Yes No
Type of Request: Personal Group Community
How will the funds be used? Funds will be used to purchase food for
distribution to those experiencing food insecurity in our
Community. We purchase most of over food from Second
Harvest Food Bank, Madison, with many items, including west
for 18 4/eb. This allows each dollar to purchase much more food,
What are the benefits to the Stoughton Community? Ques SUMC Food Partry is open
9100-11:00 AM. Jueslays + Wednesdays each week. We provide a welcoming
atmosphere to provide food for those in need of support: The working
poor, elderly and families. This allows the families to be healthing
spend more on puscriptions, housing, etc. We provide nettretion
education, free Glood pressure screening and a summer Lood program for fame
What other information would you like to share?
During theyear 2017 we provided food for over 1,215
Proucholds, serving 3, 145 people in 4 hours per week. Our volunteer
workers = 18 to 20 people.
Applicant Signature: Signatur
Applicant Signature: Date:



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Organization Name:	Stoughton Villag	e Players	Phone #: 608-8	73- 1455
Organization Address:	255 E. Main	ST 5T0	ughten, Wi	53589
Name of Individual Submit	iting Application:	Kathy H	ORTON	
Are you a no	n-profit organization?	Yes_	No_	_
Type of Requ			Community_	
How will the funds be use	d? <u>We wi</u>	11 be upd	ting the f	rent doors
for more &	energy efficie	ncy. We wi	11 keep the	historic
doors trep	lace glass w/	double glaze	d windows.	
	,			
What are the benefits to t	he Stoughton Community?	We pr	exide live	performance
to entertain	. the comme	noity		
	yould you like to share?			
What other morning	· <i>•</i>		7	
	2	r g		
Applicant Signature:	Kathey H	ortu	Date: /- /5	5-18
Applicant Signature:	, _ 0		Date:	



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Oı	ganization Name:	VSA Wisconsin, Ir	nc. P	none #:_608-241-2131		
Oı	ganization Address:	1709 Aberg Aven	ue, Suite 1, Madison,	WI 53704		
Na	ame of Individual Subm	itting Application:	Kathie Wagner, Pres	dent of VSA Wisconsin		
	Are you a non-profit organization?					
	Type of Rec	quest: Personal	Group X	Community		
Н	ow will the funds be use	ed? VSA Wis	sconsin requests support for	or the VSA Choir of Stoughton.		
The	e choir was establis	shed in 1995, and curr	ently consists of approxima	ately 17 enthusiastic adult singers		
wit	th disabilities, ages	20 to 60, who rehears	se with choral director and	music educator, Caitlin Schmidt, once a		
we	ek at United Metho	odist Church in Stough	ton. The rehearsal schedu	le culminates in two to four well attended		
loc	cal public concert p	performances over the	course of the season.			
w	hat are the benefits to	the Stoughton Community?	Many people with disability	ies live their lives hidden from public view,		
and fa	all victim to person	ally internalized low ex	pectations. Additionally, ne	gative societal attitudes towards disabilities	S	
foster social isolation, exclusion, and , rejection causing those with disabilities to withdraw from a more fruitful and						
oarticip	ation in their comn	nunities. The VSA Cho	oir provides transformative	cools that build confidence, structure and fo	cus	
n the li	ves of participants	. We take adults who s	society has told are spectat	ors, and we help them transform themselve	es:	
nto joy	ful performers. The	e Choir is also crucial in	n helping extinguish stereo	types regarding disability, by bringing the p	ublic	
w	hat other information v	vould you like to share?	face-to-face	with the talents of people with different abilit	ties.	
The Stoughton community embraces the choir through attendance at concerts and through individual donations.						
The Project Budget for the VSA Choir of Stoughton is \$9,613.						
) . h				
A	pplicant Signature:	gather of	agren	Date: January 12, 2018		
A	oplicant Signature:	-	U	Date:		



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

Serving Electric, Water & Wastewater Since 1886

Date: January 8, 2019

To: Stoughton Utilities Committee

From: Brian R. Hoops

Stoughton Utilities Assistant Director

Subject: Results from SU's annual LED holiday light customer incentive

Each year since 2011, Stoughton Utilities has offered a holiday light themed customer incentive. In past years, customers could bring in sets of older inefficient incandescent holiday lights and exchange them for sets of new energy efficient LED holiday lights. In 2017 we added the addition of indoor and outdoor light timers to promote energy conservation.

Since 2013, we have also paired the LED holiday light incentive with food drives and fundraising efforts, with customers donating 3,927 pounds of food items and \$1,650 in cash over these years.

Several changes were made to this incentive for the 2018 holiday season. Stoughton Utilities partnered with the Stoughton Personal Essentials Pantry to collect donations of household essentials that aren't provided at the food pantry, including toilet paper, Kleenex, soap, toothpaste, winter mittens, and more. Customers who donated four items received both a string of LED holiday lights and their choice of an indoor or outdoor timer.

This holiday season, 239 customers participated in the holiday light customer incentive, contributing over 1,400 items for the Stoughton Personal Essentials Pantry. Stoughton Utilities also donated an additional \$750 to the Stoughton Personal Essentials Pantry, as well as \$750 to the Stoughton Food Pantry, funded by our WPPI Energy Community Contributions Fund.

Although an exchange of incandescent lights was not required, we continued to allow customers to drop them off to be responsibly recycled. Six boxes of lights were collected for recycling.



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

Serving Electric, Water & Wastewater Since 1886

Date: January 8, 2019

To: Stoughton Utilities Committee

From: Brian R. Hoops

Stoughton Utilities Assistant Director

Brian G. Erickson

Stoughton Utilities Wastewater System Supervisor

Subject: Draft Wisconsin Department of Natural Resources (DNR) Wisconsin Pollutant

Discharge Elimination System (WPDES) wastewater treatment facility permit

Our prior Wisconsin Pollutant Discharge Elimination System (WPDES) issued by the Wisconsin Department of Natural Resources (DNR) was revoked by the DNR in 2017, with the intention of reissuing it at the same time as the permits of several other permitees in our sub-watershed. The stated purpose of this action was to implement a coordinated adaptive management approach to complying with total phosphorus water quality based effluent limits (WQBELs).

We received the draft of our proposed reissued WPDES permit on October 22, 2018, along with the public notice of issuance of the proposed permit and related documents, and the DNR is requesting comments on factual inaccuracies in the permit and supporting documents. We have submitted this draft to our engineering consultants and our legal advisors at the Wastewater Division of the Municipal Environmental Group.

The next step in the permit reissuance is a 30-day public notice and comment period. The public hearing on the permit issuance occurred on December 7, 2018. The reissued permit will have an effective date of April 1, 2019, and will remain in effect for a period of five years, expiring on March 31, 2024.

Our legal consultant provided through our membership in the Municipal Environmental Group (MEG) has reviewed the draft permit and provided staff with comments.

Stoughton Utilities has issued a public comment regarding the draft permit requesting modifications to the maximum ammonia limits, as well as minor language revisions. A public comment has been issued by the Capital Area Regional Planning Commission (CARPC) in support of the draft permit and proposed discharge limits. It is also expected that public comments were issued by the Madison Metropolitan Sewerage District (MMSD) requesting minor revisions to limitations and language affecting their facility's discharge.

Enclosed for your review and discussion are:

- 1. The DNR Public Notice of Informational Hearing & Intent to Reissue WPDES Permits
- 2. The Draft WPDES Permit
- 3. Stoughton's Facility Specific Mercury Variance Data Sheet
- 4. A summary Permit Fact Sheet
- 5. The public comment issued by CARPC
- 6. The public comments issued by Stoughton Utilities

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES PUBLIC NOTICE OF INFORMATIONAL HEARING AND INTENT TO REISSUE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMITS

WPDES permittees Madison Metropolitan Sewerage District, City of Stoughton, Village of Oregon and WI DNR Nevin Fish Hatchery located in the Rock River Basin have entered into a watershed adaptive management approach under Wis. Adm. Code s. NR 217.18 and Wis. Stat. s. 283.13(7), as a means for these facilities to achieve compliance with the phosphorus water quality standards in s. NR 102.06, Wis. Adm. Code. The phosphorus limitations and conditions in the following permits reflect the approved adaptive management plan WQT-2017-0003. Descriptions of the facilities along with changes made to each of the individual permits are listed below.

Hearing Date, Time, and Location: **December 7, 2018**, 8:00 AM to 12:00 PM, Department of Natural Resources, Fitchburg Service Center, Bluff/Drumlin Room, 3911 Fish Hatchery Road, Fitchburg, WI 53711

Hearing Officer: Tim Ryan, DNR, 3911 Fish Hatchery Road, Fitchburg, WI 53711 608-275-3277

The Department of Natural Resources, pursuant to Section 283.49, Wisconsin Statutes, has scheduled for the time and place listed above, a public hearing for the purpose of giving all interested persons an opportunity to make a statement with respect to the above announced permit actions for the following existing discharges:

Permittee Names and Permit Numbers

Madison Metropolitan Sewerage District (WI-0024597-09) City of Stoughton (WI-0020338-09) Village of Oregon (WI-0020681-09) WI DNR Nevin Fish Hatchery (WI-0002585-10)

A hearing officer will conduct the hearing in an orderly and speedy way and will use procedures specified in Subchapter II of ch. NR 203, Wis. Adm. Code, necessary to ensure broad public participation in the hearing. The hearing officer will open the hearing and make a concise statement of the scope and purpose of the hearing and shall state what procedures will be used during the course of the hearing. The hearing officer shall explain the method of notification of the final decision to grant or deny the permit and the methods by which the decision may be reviewed in a public adjudicatory hearing. The hearing officer may put limits on individual oral statements to ensure an opportunity for all persons present to make statements in a reasonable period of time and to prevent undue repetition. The hearing officer may also limit the number of representatives making oral statements on behalf of any person or group. Informational and clarifying questions and oral statements shall be directed through the hearing officer. Cross examination shall not be allowed.

Persons wishing to comment on or object to the proposed permit actions are invited to do so by attending the public hearing or by submitting any comments or objections in writing to the Department of Natural Resources, at the permit drafter's address. All comments or suggestions received from members of the public no later than 7 days following the date of this public hearing will be used, along with other information on file and testimony presented at the hearing, in making a final determination. Where designated as a reviewable surface water discharge permit, the U.S. Environmental Protection Agency is allowed up to 90 days to submit comments or objections regarding this permit determination.

Information on file for these permit actions, including the draft permits, fact sheets and permit applications, may be inspected and copied at the permit drafter's or basin engineer's offices, Monday through Friday (except holidays), between 9:00 a.m. and 3:30 p.m. Please call the permit drafter or basin engineer for directions to their office location, if necessary. Information on this permit action may also be obtained by calling the permit drafter at (608) 273-5969 or by writing to the Department. Reasonable costs (15 cents per page for copies and 7 cents per page for scanning) will be charged for information in the file other than the public notice, permit and fact sheet. Permit information is also available on the internet at: http://dnr.wi.gov/topic/wastewater/PublicNotices.html. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.

The Department has tentatively decided that the above specified WPDES permits should be reissued.

Limitations and conditions which the Department believes adequately protect the receiving water are included in the proposed permits. Land application of waste shall be done in accordance with permit conditions and applicable codes. All land application sites shall be approved prior to their use. To receive a list of approved sites, or to be notified of potential approvals, contact the basin engineers.

Proposed Phosphorus Adaptive Management Approach:

Adaptive Management Plan No. WQT-2017-0003 is a partnership between WPDES permittees and a diverse group of entities that are not WPDES permit holders. The WPDES permittees include three publicly owned treatment works (POTWs) – the Madison Metropolitan Sewerage District, City of Stoughton, Village of Oregon, and the WDNR Nevin Fish Hatchery and various Municipal Separate Storm Sewer Systems (MS4s) that have signed an intergovernmental agreement to guide implementation of the plan. The adaptive management plan is a means to achieve compliance with the phosphorus water quality standard in s. NR 102.06, Wis. Adm. Code and the Rock River TMDL. As the approved plan is written, Madison Metropolitan Sewerage District shall submit surface water samples as identified in AM Plan No. WQT-2017-0003 and shall submit the results as part of the annual reports on the implementation of AM Plan No. WQT-2017-0003.

The goal for phosphorus load reductions for this permit term within the Yahara River action area, as identified in WQT-2017-0003, shall be 40% of the contributing phosphorus load from the combination of all four point sources (Madison Metropolitan Sewerage District, City of Stoughton, Village of Oregon, and WI DNR Nevin Fish Hatchery). This contributing load is identified as 5,329 pounds of phosphorus per year from the contributing point sources in the adaptive management plan. If the load reduction goal is not met by March 31, 2024, the watershed adaptive management option may not be available to the participating permittees upon permit reissuance, or alternatively, the department may request appropriate modifications to the AM plan as a condition of permit reissuance.

Proposed Mercury Variances for Madison Metropolitan Sewerage District (MMSD) and the City of Stoughton: The Department has determined that a water quality-based effluent limitation (WQBEL) of 1.3 ng/L for mercury is needed to protect wildlife and human health in the below-named receiving waters. The permittees have submitted applications for alternative mercury effluent limitation (AMEL). The applications included pollutant minimization program (PMP) plans for mercury as required under s. NR 106.145(8), Wis. Adm. Code. The Department concludes that the permittees are eligible for a variance based on the information submitted, information on file and the findings provided in s. NR 106.145(1), Wis. Adm. Code. The Department and the permittees have mutually agreed upon AMELs of 3.4 ng/L for MMSD and 3.3 ng/L for Stoughton, expressed as daily maximums, continued influent and effluent monitoring, and permit language requiring implementation of the PMPs. The Department proposes to grant the AMELs, which represent variances to the water quality standard used to derive the WQBELs, as provided for under s. NR 106.145(6), Wis. Adm. Code. The designated uses of the receiving waters will not change as a result of the variances. These mercury variances must be approved by USEPA prior to inclusion in the final reissued permits.

Proposed Chloride Variance for Madison Metropolitan Sewerage District (MMSD): The Department has determined that a water quality-based effluent limitation (WQBEL) for chloride is needed in MMSD's permit to protect aquatic life. As allowed under s. NR 106.83(2), Wis. Adm. Code, the permittee has requested a variance to the chloride WQBEL. In support of this request, the permittee has submitted documentation intended to demonstrate that the treatment of chlorides by the permittee would cause more environmental damage than the continued discharge of effluent at levels currently achievable with current treatment at Madison Met and associated source reduction measures. The Department concurs with that assessment; however, this concurrence is subject to USEPA approval before the variance limit may be included in the final reissued permit. In an effort to achieve chloride effluent reductions that are practically and economically achievable within the term of the proposed permit, the Department and the permittee have mutually agreed upon specific permit terms that include an interim limitation, a target limit (or value, as the case may be), and certain source reduction activities. As allowed under s. NR 106.83(3), Wis. Adm. Code, these requirements are contained in the proposed permit.

Proposed Alternative Effluent Limit for Temperature: The Department has determined that water quality-based effluent limitations (WQBELs) for temperature are needed in MMSD's permit to assure attainment and maintenance of thermal water quality standards. The WQBELs for this permittee are: Oct–63° F; Nov–Jan 54° F. As allowed under NR 106 Subchapter VI, Wis. Adm. Code, the permittee has requested an alternative effluent limit (AEL) for temperature. In support of this request, the permittee has submitted a demonstration that the WQBELs for temperature are more stringent than necessary to assure protection and propagation of shellfish, fish and wildlife in and on the body of water into which the discharge is made. The Department concurs with the demonstration based on the information submitted and proposes to establish an AEL as follows: Oct - 69° F; and Nov – 65° F; Dec - 62° F; and Jan – 57° F. Effluent monitoring requirements are included at the frequency described in this permit. All data submitted by the permittee are available for public inspection at either the below-named permit drafter's office or the below-named basin engineer's office. Any interested person may comment upon the proposed AEL(s) for Temperature.

Permittee: Madison Metropolitan Sewerage District (MMSD)

Facility Where Discharge Occurs: Nine Springs Wastewater Treatment Facility, 1610 Moorland Road Madison, WI 53713

Receiving Waters: Outfall 001 - Badfish Creek (Lower Badfish Creek Watershed, LR07 - Lower Rock River Basin in Dane County in the SE ½ of NE ¼ of Sec. 19, T6N, R10E, Town of Dunn at Lat: 42.97119° N / Lon: 89.35259°W

Outfall 005 - Badger Mill Creek (Upper Sugar River Watershed, SP15 - Sugar-Pecatonica Basin) in Dane County in the SW ¼ of NW ¼ of Sec. 13, T6N, R8E, Town of Verona at Lat: 42.99414°N / Lon: 89.50400)

Land Treatment Outfall 008 - Groundwater (Yahara River & Lake Monona Watershed - Lower Rock River Basin) in Dane County

Brief Facility Description: The Nine Springs Wastewater Treatment Plant handles the wastewater from five cities, seven villages and some or all of 10 towns representing 28 separate sanitary districts, all located in Dane County. MMSD has an annual average design flow for Outfall 001 of 50 million gallons per day (MGD) and 3.6 MGD for Outfall 005. Actual flows averaged 40 MGD and 3.3 MGD, respectively. The wastewater receives preliminary, primary and advanced secondary treatment. The advanced secondary treatment system is composed of aeration tanks with selectors and clarifiers. Phosphorus removal is accomplished biologically in this process. Following final clarification, the treated water is disinfected using ultraviolet disinfection on a seasonal basis. Treated effluent is discharged to two receiving streams - Badfish Creek and Badger Mill Creek. Thickened sludges are fed to an acid-phase anaerobic digester process. Following this process the sludge is further anaerobically digested at mesophilic temperatures. A portion of the digested biosolids are then thickened by gravity belt thickeners and temporarily stored before being recycled through land application on agricultural land. A smaller portion of the mesophilicly digested biosolids is further digested at thermophilic temperatures to meet EPA time/temperature requirements for Class A Biosolids.

Summary of Proposed Changes: Outfall 001 – Badfish Creek Added influent CBOD₅ daily monitoring. The Department has approved substituting CBOD₅ limits in the reissued permit in place of the BOD₅ limits in the current permit. A 1.0 mg/L monthly average Total Phosphorus (TP) limit will apply on the permit effective date and an adaptive management TP interim limit of 0.6 mg/L as a 6-month average will apply beginning May 1, 2019. The reissued permit will have a new fecal coliform limit of 780 #/100 ml as a weekly geometric mean. MMSD has applied for a continuation of a variance from the chronic water quality standard for chloride of 395 mg/L. MMSD has also applied for a continuation of a variance from the water quality standard for mercury based on the wildlife criterion of 1.3 ng/L as a monthly average. The reissued permit will require quarterly monitoring of total nitrogen parameters (total kjeldahl nitrogen, nitrite + nitrate nitrogen and total nitrogen). MMSD's final limits for total phosphorus for Outfall 005 to Badger Mill Creek shall be 0.075 mg/L (2.25 lbs/day) as a 6-month average and 0.225 mg/L as a monthly average and go into effect at the end of an extended phosphorus compliance schedule.

Permittee: City of Stoughton

Facility Where Discharge Occurs: Stoughton Wastewater Treatment Facility, 700 Mandt Parkway, Stoughton, WI 53589

Receiving Water and Location: Yahara River (Yahara River & Lake Kegonsa Watershed, LR06 - Lower Rock River Basin) in Dane County in the NE ¼ of SE ¼ of Sec. 8, T5N, R11E, Township of Dunkirk at Lat: 42.91025 ° N / Lon: 89.21357 ° W

Brief Facility Description: The City of Stoughton Wastewater Treatment Facility has an annual average design flow of 1.65 million gallons per day (MGD) with actual flows averaging 0.937 MGD annually. The facility serves a population of approximately 13,000 people as well as several significant industries. This facility is a conventional activated sludge plant consisting of fine screening, grit removal, primary settling, and biological treatment including biological phosphorus removal, final clarification and UV disinfection. Waste sludge is thickened in a dissolved air flotation thickener before being combined with primary sludge and anaerobically digested. The digested sludge is dewatered on a gravity belt thickener before storage. Land spreading on Department approved farmland is the final disposal option for the stored bio-solids. Back up chemical is available to treat side streams (or the forward flow if necessary) for Phosphorus.

Summary of Proposed Changes: Stoughton's reissued permit will now contain seasonal weekly average ammonia nitrogen limits. Monthly average limits will also apply. The reissued permit will have a new fecal coliform limit of 780 #/100 ml as a weekly geometric mean. Total phosphorus (TP) mass limits calculated for the Rock River total

maximum daily load (TMDL) are recommended, however, those mass limits will not go into effect at this time because of Stoughton's participation in an adaptive management approach to phosphorus compliance. A 1.0 mg/L monthly average TP limit applies on the permit effective date. An adaptive management TP interim limit of 0.6 mg/L will apply beginning November 1, 2021 per a compliance schedule. Stoughton has applied for a continuation of a variance from the water quality standard for mercury based on the wildlife criterion of 1.3 ng/L as a monthly average. The reissued permit will require quarterly monitoring of total nitrogen parameters (total Kjeldahl nitrogen, nitrite + nitrate nitrogen and total nitrogen).

Permittee: Village of Oregon

Facility Where Discharge Occurs: Oregon Wastewater Treatment Facility, 117 Spring Street, Oregon WI 53575

Receiving Water and Location: Oregon Branch (Badfish Creek Watershed, LR07 - Lower Rock River Basin) in Dane County in the SW ¼ of NE ¼ of Sec. 12, T5N, R9E at Lat: 42.92469° N / Lon: 89.37554° W

Brief Facility Description: The Village of Oregon operates a wastewater treatment facility that treats approximately 1.32 MGD of wastewater per day with an annual averge design flow of 1.8 MGD. Treatment consists of an activated sludge treatment system with grit removal and automated fine screens as preliminary treatment. The activated sludge process is designed to remove phosphorus biologically. Wastewater passes through four final clarifiers for final settling. Chemical phosphorus treatment backup is available primarily to treat side streams from sludge processing. Sludge is aerobically digested, thickened with a gravity belt thickener, and stored in a sludge storage tank during months when land spreading is not allowed by law or is impractical due to weather conditions or land availability. Biosolids are ultimately landspread on DNR approved agricultural fields.

Summary of Proposed Changes: Seasonal daily maximum, weekly average and monthly average ammonia nitrogen limits have been recalculated. Total phosphorus (TP) mass limits calculated for the Rock River TMDL along with TP concentration limits of 0.075 mg/L as a 6-month average and 0.225 mg/L as a monthly average calculated under s. NR 217.13, Wis. Adm. Code, are recommended; however, Oregon is participating in plan to implement a watershed adaptive management approach as a means for Oregon to achieve compliance with the phosphorus water quality standards. A 1.0 mg/L monthly average TP limit will apply on the permit effective date and an adaptive management TP interim limit of 0.6 mg/L as a 6-month average will apply beginning November 1, 2021.

Permittee: WI DNR Nevin Fish Hatchery

Facility Where Discharge Occurs: WI DNR Nevin Fish Hatchery, 3911 Fish Hatchery Rd, Madison, WI 53711

Receiving Water and Location: Nine Springs Creek located in the Yahara River and Lake Mendota Watershed (LR-08), Lower Rock River Basin in the NW ¼ of NE ¼ of Sec. 10, T6N, R9E in Dane County at Lat: 43.01591 / Lon: 89.41642 °W

Brief Facility Description and The WI DNR Nevin Fish Hatchery (Nevin) in Fitchburg operates a trout hatchery that raises cold water fish species (brook, brown and rainbow trout) from eggs. Annual production is approximately 30,000 pounds.

Summary of Proposed Changes: Daily Max and Monthly average BOD₅ limits were added. Total phosphorus (TP) mass limits calculated for the Rock River total maximum daily load (TMDL) are recommended and were to go into effect per a phosphorus compliance schedule contained in the current permit; however, Nevin is participating in a plan to implement a watershed adaptive management approach as a means for Nevin to achieve compliance with the phosphorus water quality standards. A 1.0 mg/L monthly average TP limit and an adaptive management TP interim limit of 0.076 mg/L as a 6-month average will apply on the permit effective date.

Department of Natural Resources Permit Contacts:

Permit Drafter: Phillip Spranger, DNR, SCR Headquarters, 3911 Fish Hatchery Rd, Fitchburg, WI 53711, (608) 273-5969, phillip.spranger@wisconsin.gov

Madison Met, Stoughton, and Oregon's Basin Engineer: Amy Garbe, DNR, 141 NW Barstow St, Room 180, Waukesha, WI 53188, (262) 574-21358) 275-3230, amy.garbe @wisconsin.gov

WDNR Nevin Fish Hatchery's Basin Engineer: Nathan Wells, DNR, 3911 Fish Hatchery Road, Fitchburg, WI 53711, (608) 275-3230, nathan.wells@wisconsin.gov

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WPDES PERMIT

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

CITY OF STOUGHTON

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility located at

700 MANDT PARKWAY, STOUGHTON, WISCONSIN

NE ¹/₄ of SE ¹/₄ of Section 8, T5N, R11E

to

YAHARA RIVER (YAHARA RIVER & LAKE KEGONSA WATERSHED, LR06 – LOWER ROCK RIVER BASIN) IN DANE COUNTY

Outfall - Lat: 42.91035° N, Lon: 89.21348° W

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis. Adm. Code, at least 180 days prior to the expiration date given below.

State of Wisconsin Department of Natural Resources For the Secretary

Wasternston Field Companying
Wastewater Field Supervisor
wastewater Field Supervisor

PERMIT TERM: EFFECTIVE DATE - April 01, 2019

EXPIRATION DATE - March 31, 2024

TABLE OF CONTENTS

1 INFLUENT REQUIREMENTS	1
1.1 Sampling Point(s) 1.2 Monitoring Requirements 1.2.1 Sampling Point 701 - INFLUENT	1 1 <i>1</i>
2 IN-PLANT REQUIREMENTS	2
-	2
2.1 Sampling Point(s) 2.2 Monitoring Requirements and Limitations 2.2.1 Sampling Point 101 - FIELD BLANK for Hg MONITORING	2 2 2
3 SURFACE WATER REQUIREMENTS	3
3.1 Sampling Point(s) 3.2 Monitoring Requirements and Effluent Limitations 3.2.1 Sampling Point (Outfall) 001 - EFFLUENT to YAHARA RIVER	3 3 3
4 LAND APPLICATION REQUIREMENTS	11
4.1 Sampling Point(s) 4.2 Monitoring Requirements and Limitations 4.2.1 Sampling Point (Outfall) 002 - SLUDGE	11 11 <i>11</i>
5 SCHEDULES	15
5.1 Adaptive Management Interim Limit Compliance Update 5.2 Mercury Pollutant Minimization Program	15 15
6 STANDARD REQUIREMENTS	17
6.1 REPORTING AND MONITORING REQUIREMENTS 6.1.1 Monitoring Results 6.1.2 Sampling and Testing Procedures 6.1.3 Recording of Results 6.1.4 Reporting of Monitoring Results 6.1.5 Compliance Maintenance Annual Reports 6.1.6 Records Retention 6.1.7 Other Information 6.1.8 Reporting Requirements – Alterations or Additions 6.2 SYSTEM OPERATING REQUIREMENTS 6.2.1 Noncompliance Reporting 6.2.2 Flow Meters 6.2.3 Raw Grit and Screenings 6.2.4 Sludge Management 6.2.5 Prohibited Wastes 6.2.6 Bypass 6.2.7 Scheduled Bypass 6.2.8 Controlled Diversions 6.2.9 Proper Operation and Maintenance	17 17 17 18 18 18 18 19 19 19 20 20 20 20 21
 6.2.10 Operator Certification 6.3 SEWAGE COLLECTION SYSTEMS 6.3.1 Sanitary Sewage Overflows and Sewage Treatment Facility Overflows 6.3.2 Capacity, Management, Operation and Maintenance (CMOM) Program 6.3.3 Sewer Cleaning Debris and Materials 6.4 SURFACE WATER REQUIREMENTS 6.4.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit 6.4.2 Appropriate Formulas for Effluent Calculations 6.4.3 Effluent Temperature Requirements 	21 21 23 23 24 24 24 24

WPDES Permit No. WI-0020338-09-0 CITY OF STOUGHTON

6.4.4 Visible Foam or Floating Solids	25
6.4.5 Surface Water Uses and Criteria	25
6.4.6 Percent Removal	25
6.4.7 Fecal Coliforms	25
6.4.8 Seasonal Disinfection	25
6.4.9 Whole Effluent Toxicity (WET) Monitoring Requirements	25
6.4.10 Whole Effluent Toxicity (WET) Identification and Reduction	26
6.4.11 Reopener Clause	26
6.5 LAND APPLICATION REQUIREMENTS	26
6.5.1 Sludge Management Program Standards And Requirements Based Upon Federally Promulgated Regulations	26
6.5.2 General Sludge Management Information	26
6.5.3 Sludge Samples	26
6.5.4 Land Application Characteristic Report	27
6.5.5 Calculation of Water Extractable Phosphorus	27
6.5.6 Monitoring and Calculating PCB Concentrations in Sludge	27
6.5.7 Annual Land Application Report	28
6.5.8 Other Methods of Disposal or Distribution Report	28
6.5.9 Approval to Land Apply	28
6.5.10 Soil Analysis Requirements	28
6.5.11 Land Application Site Evaluation	28
6.5.12 Class B Sludge: Fecal Coliform Limitation	29
6.5.13 Class B Sludge: Anaerobic Digestion	29
6.5.14 Class B Sludge - Vector Control: Injection	29
7 SUMMARY OF REPORTS DUE	30

1 Influent Requirements

1.1 Sampling Point(s)

	Sampling Point Designation				
Sampling	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)				
Point					
Number					
701	Influent: 24-hour flow proportional composite sampler located prior to the mechanical bar screen.				

1.2 Monitoring Requirements

The permittee shall comply with the following monitoring requirements.

1.2.1 Sampling Point 701 - INFLUENT

	Monitoring Requirements and Limitations				
Parameter Limit Type		nit Type Limit and Sample	Sample	Notes	
		Units	Frequency	Type	
Flow Rate		MGD	Continuous	Continuous	
CBOD ₅		mg/L	3/Week	24-Hr Flow	
				Prop Comp	
BOD ₅ , Total		mg/L	3/Week	24-Hr Flow	
				Prop Comp	
Suspended Solids,		mg/L	3/Week	24-Hr Flow	
Total				Prop Comp	
Mercury, Total		ng/L	Quarterly	Grab	See subsection 1.2.1.1 for
Recoverable					mercury monitoring
					requirements.

1.2.1.1 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

2 In-Plant Requirements

2.1 Sampling Point(s)

	Sampling Point Designation					
Sampling	Sampling Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)					
Point						
Number						
101	In-plant Mercury: Collect a mercury field blank every day that mercury samples are collected at influent					
	and effluent using the clean hands/dirty hands sample collection procedure from EPA method 1669.					

2.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

2.2.1 Sampling Point 101 - FIELD BLANK for Hg MONITORING

Monitoring Requirements and Limitations						
Parameter	Parameter Limit Type Limit and Sample Sample Notes					
		Units	Frequency	Type		
Mercury, Total		ng/L	Quarterly	Blank	See subsection 2.2.1.1 for	
Recoverable		mercury monitoring				
					requirements.	

2.2.1.1 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

3 Surface Water Requirements

3.1 Sampling Point(s)

	Sampling Point Designation				
Sampling Point	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)				
Number					
001	Effluent: 24-hour flow proportional composite sampler intake located in the disinfection channel				
	prior to UV disinfection. Grab samples after disinfection prior to discharge to Yahara River.				

3.2 Monitoring Requirements and Effluent Limitations

The permittee shall comply with the following monitoring requirements and limitations.

3.2.1 Sampling Point (Outfall) 001 - EFFLUENT to YAHARA RIVER

	Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes	
Flow Rate		MGD	Continuous	Continuous		
CBOD ₅	Weekly Avg	33 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect May through October annually.	
CBOD ₅	Weekly Avg	40 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect November through April annually.	
CBOD ₅	Monthly Avg	25 mg/L	3/Week	24-Hr Flow Prop Comp		
CBOD ₅	Weekly Avg	454 lbs/day	3/Week	Calculated	Limit in effect May through October annually.	
Suspended Solids, Total	Weekly Avg	40 mg/L	3/Week	24-Hr Flow Prop Comp		
Suspended Solids, Total	Monthly Avg	30 mg/L	3/Week	24-Hr Flow Prop Comp		
Suspended Solids, Total	Weekly Avg	567 lbs/day	3/Week	Calculated	Limit in effect January, March, May, July, August, October and December annually.	
Suspended Solids, Total	Weekly Avg	625 lbs/day	3/Week	Calculated	Limit in effect February annually.	
Suspended Solids, Total	Weekly Avg	590 lbs/day	3/Week	Calculated	Limit in effect April, June, September and November annually.	
Suspended Solids, Total	Monthly Avg	402 lbs/day	3/Week	Calculated	Limit in effect January, March, May, July, August, October and December annually.	
Suspended Solids, Total	Monthly Avg	444 lbs/day	3/Week	Calculated	Limit in effect February annually.	

WPDES Permit No. WI-0020338-09-0 CITY OF STOUGHTON

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Suspended Solids, Total	Monthly Avg	419 lbs/day	3/Week	Calculated	Limit in effect April, June, September and November annually.
pH Field	Daily Min	6.0 su	3/Week	Grab	
pH Field	Daily Max	9.0 su	3/Week	Grab	
Dissolved Oxygen	Daily Min	6.0 mg/L	3/Week	Grab	Limit in effect May through October annually.
Fecal Coliform	Geometric Mean - Monthly	400 #/100 ml	2/Week	Grab	Limit in effect May through September annually.
Fecal Coliform	Geometric Mean - Wkly	780 #/100 ml	2/Week	Grab	Limit in effect May through September annually.
Nitrogen, Ammonia Variable Limit		mg/L	3/Week	24-Hr Flow Prop Comp	Using the daily effluent pH result, look up the daily maximum variable ammonia limit from the pH dependent table at subsection 3.2.1.2. Report the variable limit in the Nitrogen, Ammonia Variable Limit column of the eDMR.
Nitrogen, Ammonia (NH ₃ -N) Total	Daily Max - Variable	mg/L	3/Week	24-Hr Flow Prop Comp	Report the daily maximum Ammonia result in the Nitrogen, Ammonia (NH ₃ -N) Total column of the eDMR. Compare to daily maximum variable ammonia limit to determine compliance.
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	18 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect October through March annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	11 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect April and May annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	28 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect June through September annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	28 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect June through March annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	20 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect April and May annually.
Phosphorus, Total	Monthly Avg	1.0 mg/L	3/Week	24-Hr Flow Prop Comp	

	Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes	
Phosphorus, Total	6-Month Avg	0.6 mg/L	3/Week	24-Hr Flow Prop Comp	This is an Adaptive Management (AM) interim limit that goes into effect beginning November 1, 2021. See subsection 5.1 for the AM interim limit compliance schedule and subsection 3.2.1.3 for averaging periods and compliance determination.	
Phosphorus, Total		lbs/day	3/Week	Calculated	Calculate the daily mass discharge of phosphorus in lbs/day on the same days phosphorus sampling occurs.	
Mercury, Total Recoverable	Daily Max	3.2 ng/L	Quarterly	Grab	This is an Alternative Mercury Effluent Limit. See subsections 3.2.1.8 for Mercury Variance information, 3.2.1.9 for Mercury Monitoring requirements and 5.2 for the mercury variance compliance schedule.	
Acute WET	Daily Max	1.0 TU _a	See Listed Qtr(s)	24-Hr Flow Prop Comp	See subsection 3.2.1.11 for whole effluent toxicity (WET) testing monitoring dates and WET requirements.	
Chronic WET	Monthly Avg	3.0 TUc	See Listed Qtr(s)	24-Hr Flow Prop Comp	See subsection 3.2.1.11 for whole effluent toxicity (WET) testing monitoring dates and WET requirements.	
Chloride		mg/L	4/Month	24-Hr Flow Prop Comp	Monitoring Only - January 1, 2022 through December 31, 2022. Samples shall be collected on four consecutive days one week per month. See subsection 3.2.1.10 for chloride monitoring requirements.	
Nitrogen, Total Kjeldahl		mg/L	Quarterly	24-Hr Flow Prop Comp	Monitoring Only	
Nitrogen, Nitrite + Nitrate Total		mg/L	Quarterly	24-Hr Flow Prop Comp	Monitoring Only	
Nitrogen, Total		mg/L	Quarterly	Calculated	Monitoring Only	

3.2.1.1 Average Annual Design Flow

The average annual design flow of the permittee's wastewater treatment facility is 1.65 MGD.

3.2.1.2 pH Dependent Variable Ammonia Limitations

The following table provides daily maximum limits throughout the pH Range:

Effluent pH s.u.	NH3-N Limit mg/L	Effluent pH s.u.	NH3-N Limit mg/L	Effluent pH s.u.	NH3-N Limit mg/L
$6.0 < pH \le 6.1$	110	$7.0 < pH \le 7.1$	72	$8.0 < pH \le 8.1$	17
$6.1 < pH \le 6.2$	108	$7.1 < pH \le 7.2$	66	$8.1 < pH \le 8.2$	14
$6.2 < pH \le 6.3$	106	$7.2 < pH \le 7.3$	59	$8.2 < pH \le 8.3$	11
$6.3 < pH \le 6.4$	104	$7.3 < pH \le 7.4$	52	$8.3 < pH \le 8.4$	9.4
$6.4 < pH \le 6.5$	101	$7.4 < pH \le 7.5$	46	$8.4 < pH \le 8.5$	7.8
$6.5 < pH \le 6.6$	98	$7.5 < pH \le 7.6$	40	$8.5 < pH \le 8.6$	6.4
$6.6 < pH \le 6.7$	94	$7.6 < pH \le 7.7$	34	$8.6 < pH \le 8.7$	5.3
$6.7 < pH \le 6.8$	89	$7.7 < pH \le 7.8$	29	$8.7 < pH \le 8.8$	4.4
$6.8 < pH \le 6.9$	84	$7.8 < pH \le 7.9$	24	$8.8 < pH \le 8.9$	3.7
$6.9 < pH \le 7.0$	78	$7.9 < pH \le 8.0$	20	$8.9 < pH \le 9.0$	3.1

3.2.1.3 Total Phosphorus Interim Limit, Averaging Periods and Compliance Determination

The adaptive management total phosphorus interim limit of 0.6 mg/L goes into effect beginning the period from November 1, 2021 through April 30, 2022. The averaging periods are May through October and November through April. Compliance with the 6-month average limit is evaluated at the end of each 6-month period on April 30th and October 31st annually.

3.2.1.4 Phosphorus Limitation(s)

The City of Stoughton has requested and the Department has approved a plan to implement a watershed adaptive management approach under Wis. Adm. Code s. NR 217.18 and Wis. Stat. s. 283.13(7), as a means for Stoughton to achieve compliance with the phosphorus water quality standard in s. NR 102.06, Wis. Adm. Code. The phosphorus limitations and conditions in this permit reflect the approved adaptive management plan WQT-2017-0003. Failure to implement terms and conditions of this section is a violation of this permit. In cooperation with the other signatories of the Intergovernmental Agreement for an Adaptive Management Plan in the Yahara Watershed, the permittee shall design and implement the actions identified in section 3 of the AM Plan No. WQT-2017-0003 in accordance with the goals and measures identified in the approved plan.

The goal for phosphorus load reductions for Stoughton for this permit term is equal to 40% of the contributing phosphorus load from Stoughton to the watershed, according to the approved adaptive management plan. This contributing load is identified as 10 pounds of phosphorus per year for Stoughton. Achievement of this load reduction may be determined by modeling the phosphorus reduction efforts as described in the adaptive management plan. If Stoughton does not achieve its load reduction goal by March 31, 2024, the watershed adaptive management option may not be available to the permittee upon permit reissuance, or alternatively, the department may request appropriate modifications to the AM plan as a condition of permit reissuance.

Pursuant to s. NR 217.18(3)(e)2, Wis. Adm. Code, the adaptive management interim limitation is 0.6 mg/L, expressed as a six-month average. Additionally, a 1.0 mg/L limitation expressed as a monthly average is required. The final calculated water quality based effluent limitations for phosphorus are based on the Rock

River TMDL and are listed in the table below. These limits will become effective at the end of four permit terms unless the adaptive management project is terminated per s. NR 217.18(3)(g), Wis. Adm. Code, or the phosphorus reductions specified in the adaptive management plan have been achieved.

Total Phosphorus	Effluent Limitations
-------------------------	-----------------------------

Month	Monthly Ave Total P Effluent Limit (lbs/day)
Jan	4.3
Feb	5.6
March	4.9
April	5.3
May	5.2
June	5.3
July	5.1
Aug	4.6
Sept	4.9
Oct	4.1
Nov	4.0
Dec	3.9

3.2.1.5 Additional Watershed Adaptive Management Project Requirements

Adaptive Management Plan No. WQT-2017-0003 is a partnership between WPDES permittees and a diverse group of entities that are not WPDES permit holders. The WPDES permittees include three publicly owned treatment works (POTWs) – the Stoughton Utilities, Village of Oregon, and the Madison Metropolitan Sewerage District and WDNR Nevin Fish Hatchery and various Municipal Separate Storm Sewer Systems (MS4s) that have signed an intergovernmental agreement to guide implementation of the plan. The adaptive management plan is a means to achieve compliance with the phosphorus water quality standard in s. NR 102.06, Wis. Adm. Code and the Rock River TMDL. As the approved plan is written, Madison Metropolitan Sewerage District shall submit surface water samples as identified in AM Plan No. WQT-2017-0003 and shall submit the results as part of the annual reports on the implementation of AM Plan No. WQT-2017-0003.

The goal for phosphorus load reductions for this permit term within the Yahara River action area, as identified in WQT-2017-0003, shall be 40% of the contributing phosphorus load from the combination of all four point sources (Stoughton Utilities, Village of Oregon, Madison Metropolitan Sewerage District and WDNR Nevin Fish Hatchery). This contributing load is identified as 5,329 pounds of phosphorus per year from the contributing point sources in the adaptive management plan. If the load reduction goal is not met by March 31, 2024, the watershed adaptive management option may not be available to the participating permittees upon permit reissuance, or alternatively, the department may request appropriate modifications to the AM plan as a condition of permit reissuance.

3.2.1.6 Adaptive Management Reopener Clause

Per NR 217.18(3)(g), Wis. Adm. Code, the Department may terminate the adaptive management option for a permittee through permit modification or at permit reissuance and require compliance with a phosphorus effluent limitation calculated under s. NR 217.13, Wis. Adm. Code, or a US EPA approved TMDL based on any of the following reasons:

1. Failure to implement the adaptive management actions in accordance with the approved adaptive management plan and compliance schedule established in the permit.

- 2. New information becomes available that changes the Department's determinations made under s. NR 217.18(2), Wis. Adm. Code.
- 3. Circumstances beyond the permittee's control have made compliance with the applicable phosphorus criterion in s. NR 102.06, Wis. Adm. Code, pursuant to the plan's goals and measures infeasible.
- 4. A determination by the Department that sufficient reductions have not been achieved to timely reduce the amount of total phosphorus to meet the criteria in s. NR 102.06, Wis. Adm. Code.

3.2.1.7 Adaptive Management Requirements - Optimization

The permittee shall continue to optimize performance to control phosphorus discharges in accordance with s. NR 217.18(3)(c), Wis Adm. Code.

3.2.1.8 Mercury Variance – Implement Pollutant Minimization Plan

This permit contains a variance to the water quality-based effluent limit (WQBEL) for mercury granted in accordance with s. 283.15, Stats. As conditions of this variance the permittee shall (a) maintain effluent quality at or below the interim effluent limitation specified in the table above, (b) implement the mercury pollutant minimization measures specified in the "Stoughton Mercury Pollutant Minimization Program PMP Plan" dated June 7, 2017, (c) follow the approved Pollutant Minimization Plan and (d) perform the actions listed in the compliance schedule. (See the Schedules section herein.)

- Monitor Influent and Effluent Mercury Concentrations in Wastewater;
- Identify Sources of Mercury;
- Contact medical facilities regarding best management practices BMPs for disposal of mercury waste and schedule site visits or an inspection yearly.;
- All dental offices have amalgam separators installed, for this permit term will document separator maintenance;
- Contact and inspect schools to assure that BMPs are in place;
- Mail best management practices forms to all industries (4). Schedule site visits every other year;
- Identify potential additional mercury contributors through a distributed survey to all commercial facilities in the wastewater service area:
- Begin outreach to two largest senior citizen centers regarding mercury BMPs;
- Expand survey of heating, ventilation, and air conditioning wholesalers, automotive repair shops, and metal scrap yards with follow-up on implementation of BMPs annually;
- Sample three main sewer interceptors, follow up with sampling of tributary areas of interceptor is found to have higher mercury levels to help identify if mercury contributors can be identified. May also identify sources of legacy mercury and plan for cure in place pipe lining prior to permit expiration; and
- Continue outreach programs to facilitate awareness and inform customers about the clean sweep disposal and recycling program.

3.2.1.9 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

3.2.1.10 Chloride Monitoring Requirements

A sample frequency of 4/month requires that samples be collected on four consecutive days one week each month. Any four consecutive days of sampling shall be exclusive to one week of a month; where Week 1 is days 1-7, Week 2 is days 8-14, Week 3 is days 15-21, and Week 4 is days 22-28.

3.2.1.11 Whole Effluent Toxicity (WET) Testing

Primary Control Water: A grab sample from the Yahara River, upstream/out

of the influence of the mixing zone and any other discharge

Instream Waste Concentration (IWC): 33%

Dilution series: At least five effluent concentrations and dual controls must be included in each test.

• Acute: 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.

• Chronic: 100, 75, 50, 25, 12.5% and any additional selected by the permittee.

WET Testing Frequency:

Acute tests shall be conducted <u>once each year</u> in rotating quarters in order to collect seasonal information about the discharge. Tests are required during the following quarters.

• Acute: July 1-September 30, 2019; October 1-December 31, 2020; January 1-March 31, 2021; April 1-June 30, 2022; and July 1-September 30, 2023

Acute WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in July 1–September 30, 2024.

Chronic tests shall be conducted <u>once each year</u> in rotating quarters in order to collect seasonal information about the discharge. Tests are required during the following quarters.

• Chronic: July 1-September 30, 2019; October 1-December 31, 2020; January 1-March 31, 2021; April 1-June 30, 2022; and July 1-September 30, 2023

Chronic WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in <u>July 1–September 30, 2024</u>.

Testing: WET testing shall be performed during normal operating conditions. Permittees are not allowed to turn off or otherwise modify treatment systems, production processes, or change other operating or treatment conditions during WET tests.

Reporting: The permittee shall report test results on the Discharge Monitoring Report form, and also complete the "Whole Effluent Toxicity Test Report Form" (Section 6, "*State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition*"), for each test. The original, complete, signed version of the Whole Effluent Toxicity Test Report Form shall be sent to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., P.O. Box 7921, Madison, WI 53707-7921, within 45 days of test completion. The Discharge Monitoring Report (DMR) form shall be submitted electronically by the required deadline.

Determination of Positive Results: An acute toxicity test shall be considered positive if the Toxic Unit - Acute (TU_a) is greater than 1.0 for either species. The TU_a shall be calculated as follows: $TU_a = 100 \div LC_{50}$. A chronic toxicity test shall be considered positive if the Toxic Unit - Chronic (TU_c) is greater than 3.0 for either species. The TU_c shall be calculated as follows: $TU_c = 100 \div IC_{25}$.

Additional Testing Requirements: Within 90 days of a test which showed positive results, the permittee shall submit the results of at least 2 retests to the Biomonitoring Coordinator on "Whole Effluent Toxicity Test Report Forms". The 90 day reporting period shall begin the day after the test which showed a positive result. The

WPDES Permit No. WI-0020338-09-0 CITY OF STOUGHTON

retests shall be completed using the same species and test methods specified for the original test (see the Standard Requirements section herein).

4 Land Application Requirements

4.1 Sampling Point(s)

The discharge(s) shall be limited to land application of the waste type(s) designated for the listed sampling point(s) on Department approved land spreading sites or by hauling to another facility.

	Sampling Point Designation				
Sampling	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)				
Point					
Number					
002	Class B, liquid, anaerobically digested, dissolved air flotation and gravity belt thickened, liquid				
	biosolids. Representative samples are taken from the sludge storage tank.				

4.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

4.2.1 Sampling Point (Outfall) 002 - SLUDGE

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
PCB Total Dry Wt	Ceiling	50 mg/kg	Once	Composite	Jan 1, 2020 - Dec 31, 2020
PCB Total Dry Wt	High Quality	10 mg/kg	Once	Composite	Jan 1, 2020 - Dec 31, 2020
Solids, Total	-	Percent	Annual	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Annual	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Annual	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Annual	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Annual	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Annual	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Annual	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Annual	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Annual	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Annual	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Annual	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Annual	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Annual	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Annual	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Annual	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Annual	Composite	
Nitrogen, Total Kjeldahl		Percent	Annual	Composite	
Nitrogen, Ammonium (NH ₄ -N) Total		Percent	Annual	Composite	
Phosphorus, Total		Percent	Annual	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and	Sample	Sample	Notes
		Units	Frequency	Type	
Phosphorus, Water		% of Tot P	Annual	Composite	
Extractable					
Potassium, Total		Percent	Annual	Composite	
Recoverable				_	

Other Sludge Requirements		
Sludge Requirements	Sample Frequency	
List 3 Requirements – Pathogen Control: The requirements in List 3 shall be met prior to land application of sludge.	Annual	
List 4 Requirements – Vector Attraction Reduction: The vector attraction reduction shall be satisfied prior to, or at the time of land application as specified in List 4.	Annual	

4.2.1.1 List 2 Analysis

If the monitoring frequency for List 2 parameters is more frequent than "Annual" then the sludge may be analyzed for the List 2 parameters just prior to each land application season rather than at the more frequent interval specified.

4.2.1.2 Changes in Feed Sludge Characteristics

If a change in feed sludge characteristics, treatment process, or operational procedures occurs which may result in a significant shift in sludge characteristics, the permittee shall reanalyze the sludge for List 1, 2, 3 and 4 parameters each time such change occurs.

4.2.1.3 Sludge Which Exceeds the High Quality Limit

Cumulative pollutant loading records shall be kept for all bulk land application of sludge which does not meet the high quality limit for any parameter. This requirement applies for the entire calendar year in which any exceedance of Table 3 of s. NR 204.07(5)(c), is experienced. Such loading records shall be kept for all List 1 parameters for each site land applied in that calendar year. The formula to be used for calculating cumulative loading is as follows:

[(Pollutant concentration (mg/kg) x dry tons applied/ac) \div 500] + previous loading (lbs/acre) = cumulative lbs pollutant per acre

When a site reaches 90% of the allowable cumulative loading for any metal established in Table 2 of s. NR 204.07(5)(b), the Department shall be so notified through letter or in the comment section of the annual land application report (3400-55).

4.2.1.4 Sludge Analysis for PCBs

The permittee shall analyze the sludge for Total PCBs one time during **2020**. The results shall be reported as "PCB Total Dry Wt". Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is performed. Analyses shall be performed in accordance with Table EM in s. NR 219.04, Wis. Adm. Code and the conditions specified in Standard Requirements of this permit. PCB results shall be submitted by January 31, following the specified year of analysis.

4.2.1.5 Lists 1, 2, 3, and 4

Zinc, mg/kg (dry weight)

List 1			
TOTAL SOLIDS AND METALS			
See the Monitoring Requirements and Limitations table above for monitoring frequency and limitations for the			
List 1 parameters			
Solids, Total (percent)			
Arsenic, mg/kg (dry weight)			
Cadmium, mg/kg (dry weight)			
Copper, mg/kg (dry weight)			
Lead, mg/kg (dry weight)			
Mercury, mg/kg (dry weight)			
Molybdenum, mg/kg (dry weight)			
Nickel, mg/kg (dry weight)			
Selenium mg/kg (dry weight)			

List 2			
NUTRIENTS			
See the Monitoring Requirements and Limitations table above for monitoring frequency for the List 2 parameters	eters		
Solids, Total (percent)			
Nitrogen Total Kjeldahl (percent)			
Nitrogen Ammonium (NH4-N) Total (percent)			
Phosphorus Total as P (percent)			
Phosphorus, Water Extractable (as percent of Total P)			
Potassium Total Recoverable (percent)			

List 3 PATHOGEN CONTROL FOR CLASS B SLUDGE

The permittee shall implement pathogen control as listed in List 3. The Department shall be notified of the pathogen control utilized and shall be notified when the permittee decides to utilize alternative pathogen control.

The following requirements shall be met prior to land application of sludge.

The following requirements shall be thet prior to land application of studge.				
Parameter	Unit	Limit		
	MPN/gTS or			
Fecal Coliform*	CFU/gTS	2,000,000		
OR, ONE OF THE FOLLOWING PROCESS OPTIONS				
Aerobic Digestion	Air Drying			
Anaerobic Digestion	Composting			
Alkaline Stabilization	PSRP Equivalent Process			
* The Fecal Coliform limit shall be reported as the geometric mean of 7 discrete samples on a dry weight basis.				

List 4 VECTOR ATTRACTION REDUCTION

The permittee shall implement any one of the vector attraction reduction options specified in List 4. The Department shall be notified of the option utilized and shall be notified when the permittee decides to utilize an alternative option.

One of the following shall be satisfied prior to, or at the time of land application as specified in List 4.

Option	Limit	Where/When it Shall be Met
Volatile Solids Reduction	≥38%	Across the process
Specific Oxygen Uptake Rate	\leq 1.5 mg O ₂ /hr/g TS	On aerobic stabilized sludge
Anaerobic bench-scale test	<17 % VS reduction	On anaerobic digested sludge
Aerobic bench-scale test	<15 % VS reduction	On aerobic digested sludge
Aerobic Process	>14 days, Temp >40°C and	On composted sludge
	Avg. Temp > 45°C	
pH adjustment	>12 S.U. (for 2 hours)	During the process
	and >11.5	
	(for an additional 22 hours)	
Drying without primary solids	>75 % TS	When applied or bagged
Drying with primary solids	>90 % TS	When applied or bagged
Equivalent	Approved by the Department	Varies with process
Process		
Injection	-	When applied
Incorporation	-	Within 6 hours of application

4.2.1.6 Daily Land Application Log

Daily Land Application Log

Discharge Monitoring Requirements and Limitations

The permittee shall maintain a daily land application log for biosolids land applied each day when land application occurs. The following minimum records must be kept, in addition to all analytical results for the biosolids land applied. The log book records shall form the basis for the annual land application report requirements.

Parameters	Units	Sample Frequency
DNR Site Number(s)	Number	Daily as used
Outfall number applied	Number	Daily as used
Acres applied	Acres	Daily as used
Amount applied	As appropriate * /day	Daily as used
Application rate per acre	unit */acre	Daily as used
Nitrogen applied per acre	lb/acre	Daily as used
Method of Application	Injection, Incorporation, or surface applied	Daily as used

^{*}gallons, cubic yards, dry US Tons or dry Metric Tons

5 Schedules

5.1 Adaptive Management Interim Limit Compliance Update

Required Action	Due Date
Progress Report #1: Submit a progress report on the ability of the wastewater treatment facility to consistently meet the Adaptive Management interim effluent limit of 0.6 mg/L as a 6-month seasonal average with averaging periods of May through October and November through April.	11/01/2019
Progress Report #2: Submit a progress report on the ability of the wastewater treatment facility to consistently meet the Adaptive Management interim effluent limit of 0.6 mg/L as a 6-month seasonal average with averaging periods of May through October and November through April.	11/01/2020
Comply with Adaptive Management Interim Limit: The Adaptive Management interim effluent limit of 0.6 mg/L as a six-month average goes into effect. The averaging periods are May through October and November through April. Compliance with the 6-month average limit is evaluated at the end of each 6-month period on April 30 and October 31 annually.	11/01/2021

5.2 Mercury Pollutant Minimization Program

As a condition of the variance to the water quality based effluent limitation(s) for mercury granted in accordance with s. NR 106.145(6), Wis. Adm. Code, the permittee shall perform the following actions.

Required Action	Due Date
Annual Mercury Progress Reports: Submit an annual mercury progress report. The annual mercury progress report shall:	01/31/2020
Indicate which mercury pollutant minimization activities or activities outlined in the approved Pollutant Minimization Plan have been implemented;	
Include an analysis of trends in monthly and annual total effluent mercury concentrations based on mercury sampling; and	
Include an analysis of how influent and effluent mercury varies with time and with significant loading of mercury such as loads from industries into the collection system.	
The first annual mercury progress report is to be submitted by the Due Date.	
Annual Mercury Progress Report #2: Submit a mercury progress report as defined above.	01/31/2021
Annual Mercury Progress Report #3: Submit a mercury progress report as defined above.	01/31/2022
Annual Mercury Progress Report #4: Submit a mercury progress report as defined above.	01/31/2023
Final Mercury Report: Submit a final report documenting the success in reducing mercury concentrations in the effluent, as well as the anticipated future reduction in mercury sources and mercury effluent concentrations. The report shall summarize mercury pollutant minimization activities that have been implemented during the current permit term and state which, if any, pollutant minimization activities from the approved pollutant minimization plan were not pursued and why. The report shall include an analysis of trends in monthly and annual total effluent mercury concentrations based on mercury sampling during the current permit term. The report shall also include an analysis of how influent and effluent mercury varies with time and with significant loading of mercury such as loads from industries into the collection system.	09/30/2023

WPDES Permit No. WI-0020338-09-0 CITY OF STOUGHTON

If the permittee intends to re-apply for a mercury variance per s. NR 106.145, Wis. Adm. Code, for the reissued permit, a detailed pollutant minimization plan outlining the pollutant minimization activities proposed for the upcoming permit term should be submitted along with the final report.	
Annual Mercury Reports After Permit Expiration: In the event that this permit is not reissued on time, the permittee shall continue to submit annual mercury reports each year covering pollutant minimization activities implemented and mercury concentration trends.	

6 Standard Requirements

NR 205, Wisconsin Administrative Code: The conditions in ss. NR 205.07(1) and NR 205.07(2), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(2).

6.1 Reporting and Monitoring Requirements

6.1.1 Monitoring Results

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report. The report may require reporting of any or all of the information specified below under 'Recording of Results'. This report is to be returned to the Department no later than the date indicated on the form. A copy of the Wastewater Discharge Monitoring Report Form or an electronic file of the report shall be retained by the permittee.

Monitoring results shall be reported on an electronic discharge monitoring report (eDMR). The eDMR shall be certified electronically by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report.

The permittee shall comply with all limits for each parameter regardless of monitoring frequency. For example, monthly, weekly, and/or daily limits shall be met even with monthly monitoring. The permittee may monitor more frequently than required for any parameter.

6.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

6.1.3 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;
- the date the analysis was performed;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

6.1.4 Reporting of Monitoring Results

The permittee shall use the following conventions when reporting effluent monitoring results:

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD₅ and Total Suspended Solids shall be considered to be limits of quantitation
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a 0 (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.

6.1.5 Compliance Maintenance Annual Reports

Compliance Maintenance Annual Reports (CMAR) shall be completed using information obtained over each calendar year regarding the wastewater conveyance and treatment system. The CMAR shall be submitted and certified by the permittee in accordance with ch. NR 208, Wis. Adm. Code, by June 30, each year on an electronic report form provided by the Department.

In the case of a publicly owned treatment works, a resolution shall be passed by the governing body and submitted as part of the CMAR, verifying its review of the report and providing responses as required. Private owners of wastewater treatment works are not required to pass a resolution; but they must provide an Owner Statement and responses as required, as part of the CMAR submittal.

The CMAR shall be certified electronically by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The certification verifies that the electronic report is true, accurate and complete.

6.1.6 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings or electronic data records for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application. All pertinent sludge information, including permit application information and other documents specified in this permit or s. NR 204.06(9), Wis. Adm. Code shall be retained for a minimum of 5 years.

6.1.7 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or correct information to the Department.

6.1.8 Reporting Requirements – Alterations or Additions

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:

- The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source.
- The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification requirement applies to pollutants which are not subject to effluent limitations in the existing permit.
- The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use of disposal sites not reported during the permit application process nor reported pursuant to an approved land application plan. Additional sites may not be used for the land application of sludge until department approval is received.

6.2 System Operating Requirements

6.2.1 Noncompliance Reporting

Sanitary sewer overflows and sewage treatment facility overflows shall be reported according to the 'Sanitary Sewer Overflows and Sewage Treatment Facility Overflows' section of this permit.

The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger health or the environment;
- any violation of an effluent limitation resulting from a bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the Department's regional office within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.

A scheduled bypass approved by the Department under the 'Scheduled Bypass' section of this permit shall not be subject to the reporting required under this section.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources immediately of any discharge not authorized by the permit. The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003.

6.2.2 Flow Meters

Flow meters shall be calibrated annually, as per s. NR 218.06, Wis. Adm. Code.

6.2.3 Raw Grit and Screenings

All raw grit and screenings shall be disposed of at a properly licensed solid waste facility or picked up by a licensed waste hauler. If the facility or hauler are located in Wisconsin, then they shall be licensed under chs. NR 500-555, Wis. Adm. Code.

6.2.4 Sludge Management

All sludge management activities shall be conducted in compliance with ch. NR 204 "Domestic Sewage Sludge Management", Wis. Adm. Code.

6.2.5 Prohibited Wastes

Under no circumstances may the introduction of wastes prohibited by s. NR 211.10, Wis. Adm. Code, be allowed into the waste treatment system. Prohibited wastes include those:

- which create a fire or explosion hazard in the treatment work;
- which will cause corrosive structural damage to the treatment work;
- solid or viscous substances in amounts which cause obstructions to the flow in sewers or interference with the proper operation of the treatment work;
- wastewaters at a flow rate or pollutant loading which are excessive over relatively short time periods so as to cause a loss of treatment efficiency; and
- changes in discharge volume or composition from contributing industries which overload the treatment works or cause a loss of treatment efficiency.

6.2.6 Bypass

This condition applies only to bypassing at a sewage treatment facility that is not a scheduled bypass, approved blending as a specific condition of this permit, a sewage treatment facility overflow or a controlled diversion as provided in the sections titled 'Scheduled Bypass', 'Blending' (if approved), 'SSO's and Sewage Treatment Facility Overflows' and 'Controlled Diversions' of this permit. Any other bypass at the sewage treatment facility is prohibited and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats. The Department may approve a bypass if the permittee demonstrates all the following conditions apply:

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance. When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, costs and affordability of implementation and risks to public health, the environment and, where the permittee is a municipality, the welfare of the community served; and
- The bypass was reported in accordance with the Noncompliance Reporting section of this permit.

6.2.7 Scheduled Bypass

Whenever the permittee anticipates the need to bypass for purposes of efficient operations and maintenance and the permittee may not meet the conditions for controlled diversions in the 'Controlled Diversions' section of this permit, the permittee shall obtain prior written approval from the Department for the scheduled bypass. A permittee's written request for Department approval of a scheduled bypass shall demonstrate that the conditions for bypassing specified in the above section titled 'Bypass' are met and include the proposed date and reason for the bypass, estimated volume and duration of the bypass, alternatives to bypassing and measures to mitigate environmental harm caused by the bypass. The department may require the permittee to provide public notification for a scheduled bypass if it is

determined there is significant public interest in the proposed action and may recommend mitigation measures to minimize the impact of such bypass.

6.2.8 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation. Sewage treatment facilities that have multiple treatment units to treat variable or seasonal loading conditions may shut down redundant treatment units when necessary for efficient operation. The following requirements shall be met during controlled diversions:

- Effluent from the sewage treatment facility shall meet the effluent limitations established in the permit. Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge;
- A controlled diversion does not include blending as defined in s. NR 210.03(2e), Wis. Adm. Code, and as may only be approved under s. NR 210.12. A controlled diversion may not occur during periods of excessive flow or other abnormal wastewater characteristics;
- A controlled diversion may not result in a wastewater treatment facility overflow; and
- All instances of controlled diversions shall be documented in sewage treatment facility records and such records shall be available to the department on request.

6.2.9 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

6.2.10 Operator Certification

The wastewater treatment facility shall be under the direct supervision of a state certified operator. In accordance with s. NR 114.53, Wis. Adm. Code, every WPDES permitted treatment plant shall have a designated operator-incharge holding a current and valid certificate. The designated operator-in-charge shall be certified at the level and in all subclasses of the treatment plant, except laboratory. Treatment plant owners shall notify the department of any changes in the operator-in-charge within 30 days. Note that s. NR 114.52(22), Wis. Adm. Code, lists types of facilities that are excluded from operator certification requirements (i.e. private sewage systems, pretreatment facilities discharging to public sewers, industrial wastewater treatment that consists solely of land disposal, agricultural digesters and concentrated aquatic production facilities with no biological treatment).

6.3 Sewage Collection Systems

6.3.1 Sanitary Sewage Overflows and Sewage Treatment Facility Overflows

6.3.1.1 Overflows Prohibited

Any overflow or discharge of wastewater from the sewage collection system or at the sewage treatment facility, other than from permitted outfalls, is prohibited. The permittee shall provide information on whether any of the following conditions existed when an overflow occurred:

• The sanitary sewer overflow or sewage treatment facility overflow was unavoidable to prevent loss of life, personal injury or severe property damage;

- There were no feasible alternatives to the sanitary sewer overflow or sewage treatment facility overflow such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or preventative maintenance activities;
- The sanitary sewer overflow or the sewage treatment facility overflow was caused by unusual or severe weather related conditions such as large or successive precipitation events, snowmelt, saturated soil conditions, or severe weather occurring in the area served by the sewage collection system or sewage treatment facility; and
- The sanitary sewer overflow or the sewage treatment facility overflow was unintentional, temporary, and caused by an accident or other factors beyond the reasonable control of the permittee.

6.3.1.2 Permittee Response to Overflows

Whenever a sanitary sewer overflow or sewage treatment facility overflow occurs, the permittee shall take all feasible steps to control or limit the volume of untreated or partially treated wastewater discharged, and terminate the discharge as soon as practicable. Remedial actions, including those in NR 210.21 (3), Wis. Adm. Code, shall be implemented consistent with an emergency response plan developed under the CMOM program.

6.3.1.3 Permittee Reporting

Permittees shall report all sanitary sewer overflows and sewage treatment overflows as follows:

- The permittee shall notify the department by telephone, fax or email as soon as practicable, but no later than 24 hours from the time the permittee becomes aware of the overflow;
- The permittee shall, no later than five days from the time the permittee becomes aware of the overflow, provide to the department the information identified in this paragraph using department form number 3400-184. If an overflow lasts for more than five days, an initial report shall be submitted within 5 days as required in this paragraph and an updated report submitted following cessation of the overflow. At a minimum, the following information shall be included in the report:
 - The date and location of the overflow;
 - •The surface water to which the discharge occurred, if any;
 - •The duration of the overflow and an estimate of the volume of the overflow;
 - •A description of the sewer system or treatment facility component from which the discharge occurred such as manhole, lift station, constructed overflow pipe, or crack or other opening in a pipe;
 - •The estimated date and time when the overflow began and stopped or will be stopped;
 - •The cause or suspected cause of the overflow including, if appropriate, precipitation, runoff conditions, areas of flooding, soil moisture and other relevant information;
 - °Steps taken or planned to reduce, eliminate and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
 - •A description of the actual or potential for human exposure and contact with the wastewater from the overflow;
 - °Steps taken or planned to mitigate the impacts of the overflow and a schedule of major milestones for those steps;
 - °To the extent known at the time of reporting, the number and location of building backups caused by excessive flow or other hydraulic constraints in the sewage collection system that occurred concurrently with the sanitary sewer overflow and that were within the same area of the sewage collection system as the sanitary sewer overflow; and
 - oThe reason the overflow occurred or explanation of other contributing circumstances that resulted in the overflow event. This includes any information available including whether the overflow was unavoidable to prevent loss of life, personal injury, or severe property damage and whether there were feasible alternatives to the overflow

NOTE: A copy of form 3400-184 for reporting sanitary sewer overflows and sewage treatment facility overflows may be obtained from the department or accessed on the department's web site at http://dnr.wi.gov/topic/wastewater/SSOreport.html. As indicated on the form, additional information may be submitted to supplement the information required by the form.

- The permittee shall identify each specific location and each day on which a sanitary sewer overflow or sewage treatment facility overflow occurs as a discrete sanitary sewer overflow or sewage treatment facility overflow occurrence. An occurrence may be more than one day if the circumstances causing the sanitary sewer overflow or sewage treatment facility overflow results in a discharge duration of greater than 24 hours. If there is a stop and restart of the overflow at the same location within 24 hours and the overflow is caused by the same circumstance, it may be reported as one occurrence. Sanitary sewer overflow occurrences at a specific location that are separated by more than 24 hours shall be reported as separate occurrences; and
- A permittee that is required to submit wastewater discharge monitoring reports under NR 205.07 (1)
 (r) shall also report all sanitary sewer overflows and sewage treatment facility overflows on that report.

6.3.1.4 Public Notification

The permittee shall notify the public of any sanitary sewer and sewage treatment facility overflows consistent with its emergency response plan required under the CMOM (Capacity, Management, Operation and Maintenance) section of this permit and s. NR 210.23 (4) (f), Wis. Adm. Code. Such public notification shall occur promptly following any overflow event using the most effective and efficient communications available in the community. At minimum, a daily newspaper of general circulation in the county(s) and municipality whose waters may be affected by the overflow shall be notified by written or electronic communication.

6.3.2 Capacity, Management, Operation and Maintenance (CMOM) Program

- The permittee shall have written documentation of the Capacity, Management, Operation and Maintenance (CMOM) program components in accordance with s. NR 210.23(4), Wis. Adm. Code. Such documentation shall be available for Department review upon request. The Department may request that the permittee provide this documentation or prepare a summary of the permittee's CMOM program at the time of application for reissuance of the WPDES permit.
- The permittee shall implement a CMOM program in accordance with s. NR 210.23, Wis. Adm. Code.
- The permittee shall at least annually conduct a self-audit of activities conducted under the permittee's CMOM program to ensure CMOM components are being implemented as necessary to meet the general standards of s. NR 210.23(3), Wis. Adm. Code.

6.3.3 Sewer Cleaning Debris and Materials

All debris and material removed from cleaning sanitary sewers shall be managed to prevent nuisances, run-off, ground infiltration or prohibited discharges.

- Debris and solid waste shall be dewatered, dried and then disposed of at a licensed solid waste facility.
- Liquid waste from the cleaning and dewatering operations shall be collected and disposed of at a permitted wastewater treatment facility.
- Combination waste including liquid waste along with debris and solid waste may be disposed of at a licensed solid waste facility or wastewater treatment facility willing to accept the waste.

6.4 Surface Water Requirements

6.4.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit

For pollutants with water quality-based effluent limits below the Limit of Quantitation (LOQ) in this permit, the LOQ calculated by the permittee and reported on the Discharge Monitoring Reports (DMRs) is incorporated by reference into this permit. The LOQ shall be reported on the DMRs, shall be the lowest quantifiable level practicable, and shall be no greater than the minimum level (ML) specified in or approved under 40 CFR Part 136 for the pollutant at the time this permit was issued, unless this permit specifies a higher LOQ.

6.4.2 Appropriate Formulas for Effluent Calculations

The permittee shall use the following formulas for calculating effluent results to determine compliance with average concentration limits and mass limits and total load limits:

Weekly/Monthly/Six-Month/Annual Average Concentration = the sum of all daily results for that week/month/six-month/year, divided by the number of results during that time period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Weekly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the week.

Monthly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the month.

Six-Month Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the six-month period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Annual Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the entire year.

Total Monthly Discharge: = monthly average concentration (mg/L) x total flow for the month (MG/month) x 8.34.

Total Annual Discharge: = sum of total monthly discharges for the calendar year.

12-Month Rolling Sum of Total Monthly Discharge: = the sum of the most recent 12 consecutive months of Total Monthly Discharges.

6.4.3 Effluent Temperature Requirements

Weekly Average Temperature – The permittee shall use the following formula for calculating effluent results to determine compliance with the weekly average temperature limit (as applicable): Weekly Average Temperature = the sum of all daily maximum results for that week divided by the number of daily maximum results during that time period.

Cold Shock Standard – Water temperatures of the discharge shall be controlled in a manner as to protect fish and aquatic life uses from the deleterious effects of cold shock. 'Cold Shock' means exposure of aquatic organisms to a rapid decrease in temperature and a sustained exposure to low temperature that induces abnormal behavior or physiological performance and may lead to death.

Rate of Temperature Change Standard – Temperature of a water of the state or discharge to a water of the state may not be artificially raised or lowered at such a rate that it causes detrimental health or reproductive effects to fish or aquatic life of the water of the state.

6.4.4 Visible Foam or Floating Solids

There shall be no discharge of floating solids or visible foam in other than trace amounts.

6.4.5 Surface Water Uses and Criteria

In accordance with NR 102.04, Wis. Adm. Code, surface water uses and criteria are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all surface waters including the mixing zone meet the following conditions at all times and under all flow and water level conditions:

- a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.
- b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.
- c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.
- d) Substances in concentrations or in combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

6.4.6 Percent Removal

During any 30 consecutive days, the average effluent concentrations of BOD_5 and of total suspended solids shall not exceed 15% of the average influent concentrations, respectively. This requirement does not apply to removal of total suspended solids if the permittee operates a lagoon system and has received a variance for suspended solids granted under NR 210.07(2), Wis. Adm. Code.

6.4.7 Fecal Coliforms

The weekly and monthly limit(s) for fecal coliforms shall be expressed as a geometric mean.

6.4.8 Seasonal Disinfection

Disinfection shall be provided from May 1 through September 30 of each year. Monitoring requirements and the limitation for fecal coliforms apply only during the period in which disinfection is required. Whenever chlorine is used for disinfection or other uses, the limitations and monitoring requirements for residual chlorine shall apply. A dechlorination process shall be in operation whenever chlorine is used.

6.4.9 Whole Effluent Toxicity (WET) Monitoring Requirements

In order to determine the potential impact of the discharge on aquatic organisms, static-renewal toxicity tests shall be performed on the effluent in accordance with the procedures specified in the "State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition" (PUB-WT-797, November 2004) as required by NR 219.04, Table A, Wis. Adm. Code). All of the WET tests required in this permit, including any required retests, shall be conducted on the Ceriodaphnia dubia and fathead minnow species. Receiving water samples shall not be collected from any point in contact with the permittee's mixing zone and every attempt shall be made to avoid contact with any other discharge's mixing zone.

6.4.10 Whole Effluent Toxicity (WET) Identification and Reduction

Within 60 days of a retest which showed positive results, the permittee shall submit a written report to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921, which details the following:

- A description of actions the permittee has taken or will take to remove toxicity and to prevent the recurrence of toxicity;
- A description of toxicity reduction evaluation (TRE) investigations that have been or will be done to identify potential sources of toxicity, including some or all of the following actions:
 - (a) Evaluate the performance of the treatment system to identify deficiencies contributing to effluent toxicity (e.g., operational problems, chemical additives, incomplete treatment)
 - (b) Identify the compound(s) causing toxicity
 - (c) Trace the compound(s) causing toxicity to their sources (e.g., industrial, commercial, domestic)
 - (d) Evaluate, select, and implement methods or technologies to control effluent toxicity (e.g., in-plant or pretreatment controls, source reduction or removal)
- Where corrective actions including a TRE have not been completed, an expeditious schedule under which corrective actions will be implemented;
- If no actions have been taken, the reason for not taking action.

The permittee may also request approval from the Department to postpone additional retests in order to investigate the source(s) of toxicity. Postponed retests must be completed after toxicity is believed to have been removed.

6.4.11 Reopener Clause

Pursuant to s. 283.15(11), Wis. Stat. and 40 CFR 131.20, the Department may modify or revoke and reissue this permit if, through the triennial standard review process, the Department determines that the terms and conditions of this permit need to be updated to reflect the highest attainable condition of the receiving water.

6.5 Land Application Requirements

6.5.1 Sludge Management Program Standards And Requirements Based Upon Federally Promulgated Regulations

In the event that new federal sludge standards or regulations are promulgated, the permittee shall comply with the new sludge requirements by the dates established in the regulations, if required by federal law, even if the permit has not yet been modified to incorporate the new federal regulations.

6.5.2 General Sludge Management Information

The General Sludge Management Form 3400-48 shall be completed and submitted prior to any significant sludge management changes.

6.5.3 Sludge Samples

All sludge samples shall be collected at a point and in a manner which will yield sample results which are representative of the sludge being tested, and collected at the time which is appropriate for the specific test.

6.5.4 Land Application Characteristic Report

Each report shall consist of a Characteristic Form 3400-49 and Lab Report. The Characteristic Report Form 3400-49 shall be submitted electronically by January 31 following each year of analysis.

Following submittal of the electronic Characteristic Report Form 3400-49, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report is true, accurate and complete. The Lab Report must be sent directly to the facility's DNR sludge representative or basin engineer unless approval for not submitting the lab reports has been given.

The permittee shall use the following convention when reporting sludge monitoring results: Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 1.0 mg/kg, report the pollutant concentration as < 1.0 mg/kg.

All results shall be reported on a dry weight basis.

6.5.5 Calculation of Water Extractable Phosphorus

When sludge analysis for Water Extractable Phosphorus is required by this permit, the permittee shall use the following formula to calculate and report Water Extractable Phosphorus:

Water Extractable Phosphorus (% of Total P) =

[Water Extractable Phosphorus (mg/kg, dry wt) ÷ Total Phosphorus (mg/kg, dry wt)] x 100

6.5.6 Monitoring and Calculating PCB Concentrations in Sludge

When sludge analysis for "PCB, Total Dry Wt" is required by this permit, the PCB concentration in the sludge shall be determined as follows.

Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is performed. Analyses shall be performed in accordance with the following provisions and Table EM in s. NR 219.04, Wis. Adm. Code.

- EPA Method 1668 may be used to test for all PCB congeners. If this method is employed, all PCB congeners shall be delineated. Non-detects shall be treated as zero. The values that are between the limit of detection and the limit of quantitation shall be used when calculating the total value of all congeners. All results shall be added together and the total PCB concentration by dry weight reported. **Note**: It is recognized that a number of the congeners will co-elute with others, so there will not be 209 results to sum.
- EPA Method 8082A shall be used for PCB-Aroclor analysis and may be used for congener specific analysis as well. If congener specific analysis is performed using Method 8082A, the list of congeners tested shall include at least congener numbers 5, 18, 31, 44, 52, 66, 87, 101, 110, 138, 141, 151, 153, 170, 180, 183, 187, and 206 plus any other additional congeners which might be reasonably expected to occur in the particular sample. For either type of analysis, the sample shall be extracted using the Soxhlet extraction (EPA Method 3540C) (or the Soxhlet Dean-Stark modification) or the pressurized fluid extraction (EPA Method 3545A). If Aroclor analysis is performed using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.11 mg/kg as possible. Reporting protocol, consistent with s. NR 106.07(6)(e), should be as follows: If all Aroclors are less than the LOD, then the Total PCB Dry Wt result should be reported as less than the highest LOD. If a single Aroclor is detected then that is what should be reported for the Total PCB result. If multiple Aroclors are detected, they should be summed and reported as Total PCBs. If congener specific analysis is done using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.003

WPDES Permit No. WI-0020338-09-0 CITY OF STOUGHTON

mg/kg as possible for each congener. If the aforementioned limits of detection cannot be achieved after using the appropriate clean up techniques, a reporting limit that is achievable for the Aroclors or each congener for the sample shall be determined. This reporting limit shall be reported and qualified indicating the presence of an interference. The lab conducting the analysis shall perform as many of the following methods as necessary to remove interference:

3620C – Florisil 3611B - Alumina

3640A - Gel Permeation 3660B - Sulfur Clean Up (using copper shot instead of powder)

3630C - Silica Gel 3665A - Sulfuric Acid Clean Up

6.5.7 Annual Land Application Report

Land Application Report Form 3400-55 shall be submitted electronically by January 31, each year whether or not non-exceptional quality sludge is land applied. Non-exceptional quality sludge is defined in s. NR 204.07(4), Wis. Adm. Code. Following submittal of the electronic Annual Land Application Report Form 3400-55, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

6.5.8 Other Methods of Disposal or Distribution Report

The permittee shall submit electronically the Other Methods of Disposal or Distribution Report Form 3400-52 by January 31, each year whether or not sludge is hauled, landfilled, incinerated, or exceptional quality sludge is distributed or land applied. Following submittal of the electronic Report Form 3400-52, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

6.5.9 Approval to Land Apply

Bulk non-exceptional quality sludge as defined in s. NR 204.07(4), Wis. Adm. Code, may not be applied to land without a written approval letter or Form 3400-122 from the Department unless the Permittee has obtained permission from the Department to self approve sites in accordance with s. NR 204.06 (6), Wis. Adm. Code. Analysis of sludge characteristics is required prior to land application. Application on frozen or snow covered ground is restricted to the extent specified in s. NR 204.07(3) (1), Wis. Adm. Code.

6.5.10 Soil Analysis Requirements

Each site requested for approval for land application must have the soil tested prior to use. Each approved site used for land application must subsequently be soil tested such that there is at least one valid soil test in the four years prior to land application. All soil sampling and submittal of information to the testing laboratory shall be done in accordance with UW Extension Bulletin A-2100. The testing shall be done by the UW Soils Lab in Madison or Marshfield, WI or at a lab approved by UW. The test results including the crop recommendations shall be submitted to the DNR contact listed for this permit, as they are available. Application rates shall be determined based on the crop nitrogen recommendations and with consideration for other sources of nitrogen applied to the site.

6.5.11 Land Application Site Evaluation

For non-exceptional quality sludge, as defined in s. NR 204.07(4), Wis. Adm. Code, a Land Application Site Request Form 3400-053 shall be submitted to the Department for the proposed land application site. The Department will

evaluate the proposed site for acceptability and will either approve or deny use of the proposed site. The permittee may obtain permission to approve their own sites in accordance with s. NR 204.06(6), Wis. Adm. Code.

6.5.12 Class B Sludge: Fecal Coliform Limitation

Compliance with the fecal coliform limitation for Class B sludge shall be demonstrated by calculating the geometric mean of at least 7 separate samples. (Note that a Total Solids analysis must be done on each sample). The geometric mean shall be less than 2,000,000 MPN or CFU/g TS. Calculation of the geometric mean can be done using one of the following 2 methods.

Method 1:

Geometric Mean = $(X_1 \times X_2 \times X_3 \dots \times X_n)^{1/n}$

Where X = Coliform Density value of the sludge sample, and where n = number of samples (at least 7)

Method 2:

Geometric Mean = antilog[$(X_1 + X_2 + X_3 ... + X_n) \div n$]

Where $X = log_{10}$ of Coliform Density value of the sludge sample, and where n = number of samples (at least 7) Example for Method 2

Sample Number	Coliform Density of Sludge Sample	\log_{10}
1	6.0×10^5	5.78
2	4.2×10^6	6.62
3	1.6×10^6	6.20
4	9.0×10^5	5.95
5	4.0×10^5	5.60
6	1.0×10^6	6.00
7	5.1×10^5	5.71

The geometric mean for the seven samples is determined by averaging the log_{10} values of the coliform density and taking the antilog of that value.

$$(5.78 + 6.62 + 6.20 + 5.95 + 5.60 + 6.00 + 5.71) \div 7 = 5.98$$

The antilog of $5.98 = 9.5 \times 10^5$

6.5.13 Class B Sludge: Anaerobic Digestion

Treat the sludge in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35° C to 55° C and 60 days at 20° C. Straightline interpolation to calculate mean cell residence time is allowable when the temperature falls between 35° C and 20° C.

6.5.14 Class B Sludge - Vector Control: Injection

No significant amount of the sewage sludge shall be present on the land surface within one hour after the sludge is injected.

7 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Adaptive Management Interim Limit Compliance Update -Progress Report #1	November 1, 2019	15
Adaptive Management Interim Limit Compliance Update -Progress Report #2	November 1, 2020	15
Adaptive Management Interim Limit Compliance Update -Comply with Adaptive Management Interim Limit	November 1, 2021	15
Mercury Pollutant Minimization Program -Annual Mercury Progress Reports	January 31, 2020	15
Mercury Pollutant Minimization Program - Annual Mercury Progress Report #2	January 31, 2021	15
Mercury Pollutant Minimization Program - Annual Mercury Progress Report #3	January 31, 2022	15
Mercury Pollutant Minimization Program - Annual Mercury Progress Report #4	January 31, 2023	15
Mercury Pollutant Minimization Program -Final Mercury Report	September 30, 2023	15
Mercury Pollutant Minimization Program -Annual Mercury Reports After Permit Expiration	See Permit	16
Compliance Maintenance Annual Reports (CMAR)	by June 30, each year	18
General Sludge Management Form 3400-48	prior to any significant sludge management changes	26
Characteristic Form 3400-49 and Lab Report	by January 31 following each year of analysis	27
Land Application Report Form 3400-55	by January 31, each year whether or not non-exceptional quality sludge is land applied	28
Other Methods of Disposal or Distribution Report Form 3400-52	by January 31, each year whether or not sludge is hauled, landfilled, incinerated, or exceptional quality sludge is distributed or land applied	28
Wastewater Discharge Monitoring Report	no later than the date	17

WPDES Permit No. WI-0020338-09-0 CITY OF STOUGHTON

indicated on the form	
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Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to:

Southeast Region - Waukesha, 141 NW Barstow St., Room 180, Waukesha, WI 53188

Facility Specific Mercury Variance Data Sheet				
Directions: Please complete this form electronically. Record information in the space provided. Select checkboxes by double clicking on them. Do not delete or alter any fields. For citations, include page number and section if applicable. Please ensure that all data requested are included and as complete as possible. Attach additional sheets if needed.				
Section I: General Information				
A. Name of Permittee: CITY OF STOUGHTON	_			
B. Facility Name: STOUGHTON WASTEWATER TREATMENT FACILITY	_			
C. Submitted by: Wisconsin Department of Natural Resources	_			
D. State: Wisconsin Substance: Mercury Date completed: October 22, 2018	_			
E. Permit #: WI-0020338-09-0 WQSTS #: (EPA USE ONLY))			
F. Duration of Variance Start Date: April 1, 2019 End Date: March 31, 2024				
G. Date of Variance Application: October 31, 2016				
H. Is this permit a: ☐ First time submittal for variance ☐ Renewal of a previous submittal for variance (Complete Section X)				
 I. Description of proposed variance: Variance for Mercury from the wildlife water quality based criteria limit of 1.3 ηg/L to an interim limit of 3.2 ηg/L. The permittee has submitted an application for an alternative mercury effluent limitation (AMEL). The application included a pollutant minimization program (PMP) plan for mercury as required under s. NR 106.145(8), Wis. Adm. Code. This is a request for a renewal of a variance EPA approved for the current permit term that had an AMEL of 3.3 ng/L. Citation: An alternative mercury effluent limitation under s. NR 106.145, Wis. Adm. Code represents a variance 				
to water quality standards authorized by s. 283.15, Wis. Stats.	_			
J. List of all who assisted in the compilation of data for this form Name Email Phone Contribution	1			
Phillip Spranger phillip.spranger@wisconsin.gov 608-273-5969	1			
Amy Garbe amy.garbe@wisconsin.gov 262-574-2135	1			
Jacob Zimmerman Jacob.zimmerman@wisconsin.gov 608-275-3230 Parts II D-H and J	1			
	1			
Section II: Criteria and Variance Information	Ī			
A. Water Quality Standard from which variance is sought: 1.3 ng/L Wildlife Criterion	_			
B. List other criteria likely to be affected by variance: 1.5 ng/L Human Threshold Criterion	_			
C. Source of Substance: Dental offices, accidental releases/spills, industries, commercial businesses and hospital and/or medical facilities.				
D. Ambient Substance Concentration: Assumed background concentration is above the wildlife criterion. ☐ Measured ☐ Measured ☐ Unknown				
E. If measured or estimated, what was the basis? Include citation.				
Department Guidance: Determining Mercury Limits in Wisconsin Surface Waters (04/12/2006)				
Average effluent discharge rate: Design = 1.65 MGD Actual (2017) = 1.1 MGD Maximum effluent discharge rate: 06/26/2013 = 2.54 MGD				
G. Effluent Substance Concentration: Average = 1.49 ng/L Measured Estimated				
Minimum = 0.76 ng/L ☐ Default ☐ Unknown				
Maximum = 2.6 ng/L				
1-day $P99 = 3.22 \text{ ng/L}$				
30-day P99 = 1.74 ng/L	_			
H. If measured or estimated, what was the basis? Include Citation. 16 samples collected between September				
30, 2014 and June 4, 2018. Type of HAC: Type of HAC: Type 1, HAC reflects weterhody/receiving water conditions	_			
I. Type of HAC: Type 1: HAC reflects waterbody/receiving water conditions				

	☐ Type 2: HAC reflects achievable effluent conditions ☐ Type 3: HAC reflects current effluent conditions
J.	Statement of HAC: The Department has determined the highest attainable condition of the receiving water is
	achieved through the application of the variance limit in the permit, combined with a permit requirement that
	the permittee implement its Mercury PMP. Thus, the HAC at commencement of this variance is 3.2 ng/L,
	which reflects the greatest mercury reduction achievable with the current treatment processes, in conjunction
	with the implementation of the permittee's Mercury PMP. The current effluent condition is reflective of on-site
	optimization measure that have already occurred. This HAC determination is based on the economic feasibility
	of available compliance options for Stoughton Wastewater Treatment Facility at this time (see Economic
	Section below). The permittee may seek to renew this variance in the subsequent reissuance of this permit; the
	Department will reevaluate the HAC in its review of such a request. A subsequent HAC cannot be defined as
	less stringent than this HAC.
	less sunigent than this TIAC.
K.	Variance Limit: 3.2 ng/L 1-day P99
	Level currently achievable (LCA):
	3.22 ng/L (1-day P ₉₉)
	2.25 ng/L (4-day P ₉₉)
	1.74 ng/L (30-day P ₉₉)
М	What data were used to calculate the LCA, and how was the LCA derived? (Immediate compliance with
IVI.	LCA is required.)
	Analysis of effluent mercury data from September 30, 2014 through June 4, 2018 indicated that the 1-day P99
	of data is 3.2 ng/L (3.22 ng/L, rounded). See "P99s" worksheet in "Stoughton Trends of Data Hg 2014-
	2018.xls" spreadsheet submitted to EPA electronically. Note that this value is based on an updated data set from
	that used in the May 22, 2017 WQBEL Memo.
	CV. 41. NP 10(145/5) W. A.L. C. 1
TA.T	Citation: s. NR 106.145(5), Wis. Adm. Code.
IN.	Explain the basis used to determine the variance limit (which must be \leq LCA). Include citation. The variance limit = 1 Day P99. The limit is established in accordance with s. NR 106.145(5), Wis. Adm.
	Code.
0.	Select all factors applicable as the basis for the variance provided 1 2 3 4 5
	under 40 CFR 131.10(g). Summarize justification below:
	Section NR 106.145(1), Wis. Adm. Code, outlines several findings that justify variances for mercury. The
	Department intended that this provision be generally applicable to all dischargers of mercury, which produce
	large volumes of effluent with already extremely low mercury concentrations. The Department considers treating to produce effluent at concentrations to meet the limit to be technically and economically infeasible.
	treating to produce errorent at concentrations to meet the finit to be technically and economically infeasible.
	Citation: Assessing the Economic Impacts of the Proposed Ohio EPA Water Rules on the Ohio Economy,
	April 24, 1997, Ohio Environmental Protection Agency, Division of Surface Water and Foster Wheeler
	Environmental Corporation and DRI/McGraw-Hill in support of Amended and New Rules in OAC Chapters
	3745-1, -2, and -33.
	ction III: Location Information
	Counties in which water quality is potentially impacted: Dane & Rock
	Receiving waterbody at discharge point: Yahara River
C.	Flows into which stream/river? Rock River How many miles downstream? 15
D.	Coordinates of discharge point (UTM or Lat/Long): Lat: 42.91035° N / Lon: 89.21348° W
Ľ.	What are the designated uses associated with this waterbody? Default Fish and Aquatic Life
	Default Fish and Aquatic Life
F.	What is the distance from the point of discharge to the point downstream where the concentration of the
	substance falls to less than or equal to the chronic criterion of the substance for aquatic life protection?
	Ambient mercury concentrations in surface water resulting from the variance will be substantially less than
	levels that result in direct toxicity to aquatic organisms. FPA's current chronic aquatic life criterion for mercury

				ers of magnitude greater 3 μg/L for chronic and a		
G.		ation used to cal				,, <u>,</u>
	H. Identify all other variance permittees for the same substance which discharge to the same stream, river,					
		ı a location where	e the effects of	the combined variance	es would ha	ve an additive effect on
	the waterbody:					
_	ermit Number	Facility 1	Name	Facility Locati	ion	Variance Limit [µg/L]
N/	/A	N/A		N/A		N/A
	DI (1 I	1 / 1		1 (1 1 1	1 6	
				schematic showing the		
I.				y draining to this wate list? If yes, please list	Yes	No Unknown
1.		•	e CWA 303(a)) list? II yes, please list	ĭ Y es	□ No □Unknown
	the impairment	s below.				
	River I	Mile		Pollutant		Impairment
0-	22.6	VIIIC	Total Suspen		Degraded 1	
	22.6		Total Phosph		Low DO	Tuotut
	22.0		1000111105011	orus	ECW DO	
Sec	ction IV: Pret	reatment (comr	olete this section	n only for POTWs with	DNR-Appro	oved Pretreatment
		, -		Pretreatment Programs.		yved i retreatment
				ercury to the POTW? I		list.
1.1.	N/A	idasti idi asti s	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	creary to the 101 vv 1	r so, preuse	1150
В.		al users in compl	iance with loc	al pretreatment limits f	for mercury	? If not, please include a
						elevant correspondence
				ndustrial SRM updates		
	Stoughton does not have local pretreatment limits and so therefore all industries are considered in compliance.					
C.	When were loca	al pretreatment li	mits for merc	ury last calculated?		
	N/A					
D.						luring the permit term to
	reduce the industry's discharge of the variance pollutant to the POTW					
	Over the years the levels of mercury at the treatment has varied between 1 and 3 ng/L. There have been 3					
	sectors of potential sources that have been instructed to implement BMPs in the past. These sectors are dental,					
	medical and industrial. Specific PMPs have been identified on page 4 of the PMP.					
Sa	ction V: Pu	ıblic Notice				
			4h:	. d	⊠ Yes	□No
		tice been given fo blic hearing held		eu variance:	Yes	□ No □N/A
	What type of no		as wen.		1 cs	INO LINA
С.			notice for ne	rmit 🗌 Separate notic	e of varianc	·e
			- 1100100 101 PC	- mio 🗀 separate notic		
D.	Date of public n	notice: October	22, 2018	Date of hearing	g: Decemb	per 7, 2018
				gards to this notice or	Yes	No
		, please attach on		O	_	_
Sec	ction VI: Hu	uman Health				
Α.	Is the receiving	water designated	l as a Public V	Vater Supply?	Yes	⊠ No
В.		eria affected by v		ng/L Human Threshold		_
		•				nd include any citations:
				ect human health directle		
						t of any ambient mercury
				ty criterion for the prote		
				to guide them on the am		
	safely		•	-		-

- Given the lack of wastewater treatment technologies capable of reducing mercury concentrations to achieve a 1.3 ng/L effluent limit, granting a variance in this situation is consistent with protecting the public health, safety and welfare because of the substantial public health and safety benefits of providing wastewater treatment, the continued commitment towards further mercury pollutant minimization, the Wisconsin fish advisory program, and the limited impact of the elevated effluent concentrations given the background mercury concentrations.
- DNR's findings suggest that Hg in walleye from Wisconsin lakes changed in the range of 0.5 to 0.8% per year depending on geographical position in the state during the period of 1982–2005. These trends may reflect geographically differing temporal trends in the amount of Hg deposited to Wisconsin lakes. However, long-term changes in other factors, such as water chemistry, fish growth rates, and lake levels, known to impact Hg bioavailability and accumulation may also be important. (Temporal trends of mercury concentrations in Wisconsin walleye (Sander vitreus), 1982–2005, Paul W. Rasmussen, Candy S. Schrank, Patrick A. Campfield. Ecotoxicology (2007) 16:541–550)

Section VII: Aquatic Life and Environmental Impact

- **A.** Aquatic life use designation of receiving water: Warm Water Sport Fish
- **B.** Applicable criteria affected by variance: 1.3 ng/L Wildlife Criterion
- C. Identify any environmental impacts to aquatic life expected to occur with this variance, and include any citations:

Not Likely to Adversely Affect

- Ambient mercury concentrations resulting from the variance will be substantially less than levels that
 result in direct toxicity to aquatic organisms. EPA's current chronic aquatic life criterion for mercury
 is 0.9081 μg/L, which is approximately three orders of magnitude greater than the wildlife criteria
 (0.0013 μg/L). Wisconsin's criteria are 0.44 μg/L and 0.83 μg/L for chronic and acute toxicity,
 respectively.
 - o Hine's emerald dragonfly (Somatochlora hineana, endangered)
 - o Higgins' Eye mussel (Lampsilis higgnsii, endangered)
 - o Winged Mapleleaf mussel (Quadrula fragosa, endangered)
 - o Spectaclecase (Cumberlandia monodonta, candidate)
 - Sheepnose (Plethobasus cyphyus, candidate)
- Low trophic level prey where mercury in prey is unlikely to accumulate to toxic levels in the organism.
 - o Piping plover (Charadrius melodus, endangered)
 - o Eastern massasauga rattlesnake (Sistrurus catenatus catenatus, candidate)

May Affect, Not Likely to Adversely Affect

• Bald eagle (Haliaeetus leucocephalus, Delisted due to Recovery)

Bald eagles consume fish and waterfowl from surface waters, which puts them at risk of exposure to toxic levels of mercury due to bioaccumulation of mercury in their prey organisms. However, despite the potential for exposure, ambient surface water data show that in recent decades, mercury levels have not increased and bald eagle populations have continued to grow. This indicates that current ambient concentrations of mercury and mercury concentrations in prey organisms do not appear to be limiting recovery of bald eagle populations in Wisconsin. Although this variance will allow permitted dischargers additional time to identify and control sources of mercury in their discharges, the pollutant minimization component of the variances should result in a net reduction in the amount of mercury discharged to Wisconsin surface waters from permitted point sources, further reducing any risk to bald eagles. In addition, the pollutant minimization programs encourage other pollution prevention efforts, which has a beneficial indirect effect of reducing the use and production of products and processes that use or contribute mercury to the environment. These efforts will also benefit bald eagles.

D. List any Endangered or Threatened species known or likely to occur within the affected area, and include any citations:

Because mercury is pervasive, persistent and bio accumulating in the environment we considered all species listed for the entire state of Wisconsin. The following is Federally Endangered, Threatened, Proposed, and Candidate Species in Wisconsin From U.S. Fish and Wildlife Service, Region 3, April 2015

MAMMALS

Canada lynx (T)

Gray wolf (E)

	hern long-eared bat (T)				
	BIRDS Virtland's worklar (E)				
	Kirtland's warbler (E) Piping plover (E and CH)				
	Knot (T)				
	oping crane - (NEP)				
	TILE				
	ern massasauga rattlesnake (C)				
	ECTS				
	's emerald dragonfly (E)				
	er blue butterfly (E)				
	eshiek skipperling (E and PCH)				
	MS (Freshwater mussels, Unionids)				
	ins' eye pearlymussel (E)				
	pnose mussel (E)				
	fbox (E)				
	taclecase mussel (E)				
Wing	ged mapleleaf mussel (E)				
	Citation: U.S. Fish & Wildlife Service – Environmental Conservation Online System				
((http://www.fws.gov/endangered/) and National Heritage Index (http://dnr.wi.gov/topic/nhi/)				
Sect	tion VIII: Economic Impact and Feasibility				
	A. Describe the permittee's current pollutant control technologies in the treatment process: The City of				
	Stoughton serves a population of approximately 13,000 people as well as several significant industries (see				
	list above). This facility is a conventional activated sludge plant consisting of fine screening, grit removal,				
	primary settling, and biological treatment including Bio-P removal, final clarification and UV disinfection.				
	Waste sludge is thickened in a dissolved air flotation thickener before being combined with primary sludge				
	and anaerobically digested. The digested sludge is dewatered on a gravity belt thickener before storage.				
	Land spreading on Department approved farmland is the final disposal option for the stored bio-solids.				
	Back up chemical is available to treat side streams (or the forward flow if necessary) for Phosphorus. The				
	collection system for the City of Stoughton is a separate sewer system with no constructed overflow points.				
	The City is also covered under a "no exposure certification" for storm water. The Department has found the				
	City to be in substantial compliance with its current permit.				
	What modifications would be necessary to comply with the current limits? Include any citations.				
	The Department did not evaluate what actions or modifications or other changes would be needed to meet limits				
	based on the water quality standard. As discussed below, the Department considers treating to produce effluent				
	at concentrations to meet the limit to be technically and economically infeasible.				
	Citation: Assessing the Economic Impacts of the Proposed Ohio EPA Water Rules on the Ohio Economy,				
	April 24, 1997, Ohio Environmental Protection Agency, Division of Surface Water and Foster Wheeler				
	Environmental Corporation and DRI/McGraw-Hill in support of Amended and New Rules in OAC Chapters				
	3745-1, -2, and -33.				
C. I	Identify any expected environmental impacts that would result from further treatment, and include any				
	citations:				
6	See above.				
D. I	Is it technically and economically feasible for this permittee to modify 🔲 Yes 🛛 No 🔲 Unknown				
t	the treatment process to reduce the level of the substance in the				
(discharge?				
The I	Department considers treating to produce effluent at concentrations to meet the limit to be technically and				
economically infeasible.					
	tion: Assessing the Economic Impacts of the Proposed Ohio EPA Water Rules on the Ohio Economy, April 24,				
1997, Ohio Environmental Protection Agency, Division of Surface Water and Foster Wheeler Environmental					
Corporation and DRI/McGraw-Hill in support of Amended and New Rules in OAC Chapters 3745-1, -2, and -33.					
	If treatment is possible, is it possible to comply with the limits on the Yes No Unknown				
	substance?				
	If yes, what prevents this from being done? Include any citations.				
г. 1	ii yes, what prevents this from being done: include any chanons.				

See above.

G. List any alternatives to current practices that have been considered, and why they have been rejected as a course of action, including any citations:

See above.

Section IX: Compliance with Water Quality Standards

- A. Describe all activities that have been, and are being, conducted to reduce the discharge of the substance into the receiving stream. This may include existing treatments and controls, consumer education, promising centralized or remote treatment technologies, planned research, etc. Include any citations. The permittee has a Pollution Management Prevention (PMP) plan in place to reduce mercury discharge into the water way. The PMP plan is to identify and target source (i.e. dentist offices, hospitals, schools and industries) of mercury from discharging into sanitary sewer or water ways. In continuing efforts to reduce mercury, the permittee holds Clean Sweep programs annually and basil or fever thermometers have been prohibited within the city since 2006. See the PMP report for more details.
- **B.** Describe all actions that the permit requires the permittee to complete during the variance period to ensure reasonable progress towards attainment of the water quality standard. Include any citations. From Stoughton's proposed permit:
 - 3.2.1.8 Mercury Variance Implement Pollutant Minimization Plan

This permit contains a variance to the water quality-based effluent limit (WQBEL) for mercury granted in accordance with s. 283.15, Stats. As conditions of this variance the permittee shall (a) maintain effluent quality at or below the interim effluent limitation specified in the table above, (b) implement the mercury pollutant minimization measures specified in the "Stoughton Mercury Pollutant Minimization Program PMP Plan" dated June 7, 2017 (see below for PMP action items), (c) follow the approved Pollutant Minimization Plan and (d) perform the actions listed in the compliance schedule. (See the Schedules section herein.)

- Monitor Influent and Effluent Mercury Concentrations in Wastewater;
- Identify Sources of Mercury;
- Contact medical facilities regarding best management practices BMPs for disposal of mercury waste and schedule site visits or an inspection yearly.;
- All dental offices have amalgam separators installed, for this permit term will document separator maintenance;
- Contact and inspect schools to assure that BMPs are in place;
- Mail best management practices forms to all industries (4). Schedule site visits every other year;
- Identify potential additional mercury contributors through a distributed survey to all commercial facilities in the wastewater service area;
- Begin outreach to two largest senior citizen centers regarding mercury BMPs;
- Expand survey of heating, ventilation, and air conditioning wholesalers, automotive repair shops, and metal scrap yards with follow-up on implementation of BMPs annually;
- Sample three main sewer interceptors, follow up with sampling of tributary areas of interceptor is found to have higher mercury levels to help identify if mercury contributors can be identified. May also identify sources of legacy mercury and plan for cure in place pipe lining prior to permit expiration; and
- Continue outreach programs to facilitate awareness and inform customers about the clean sweep disposal and recycling program.

Submit annual mercury reduction progress reports (a total of four) indicating which mercury pollutant minimization practices have been implemented and a calculated annual mass discharge of mercury. Also, submit a Final Mercury Report documenting the success in meeting the final mercury limit of 1.3 ng/L.

Sec	ction X: Compliance with P	revious Permit (V	Variance Reissua	nces Onl	y)	
A.	Date of previous submittal: May	9, 2014	Date of EPA App	roval: J	uly 17, 20	14
B.	Previous Permit #: WI-0020338-	08-0	Previous WQSTS	#:	(EPA	USE ONLY)
C.	Effluent substance concentration:	1.57 ng/L (mean)	Variance Limit:	3.3 ng/L		
D.	Target Value(s): 1.3 ng/L		Achieved?	☐ Yes	No No	□Partial
E.	For renewals, list previous steps that	at were to be comple	ted. Show whether	these step	s have be	en

completed in compliance with the terms of the previous variance permit. Attach additional sheets if					
necessary.					
Condition of Previous Variance	Compliance				
Meet interim limits of 3.3 ng/L as a daily maximum.	⊠ Yes □ No				
Submit annual reports.	⊠ Yes □ No				

Permit Fact Sheet

General Information

Permit Number:	WI-002	20338-0)9-0										
Permittee Name:	CITY (OF STO	OUGHT	ON									
Address: City/State/Zip:	700 Ma PO Box Stough	x 383	,										
Discharge Location:	~ /	~ /				Townshi 89° 12'		unkirk	at 700 M	Iandt Pa	rkway	in the C	ity
Receiving Water:		Yahara River (Yahara River & Lake Kegonsa Watershed, LR06 – Lower Rock River Basin) in Dane County											
StreamFlow (Q _{7,10})	Ann	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
(cfs):	21	97	79	76	46	54	27	24	33	32	36	100	120
Stream Classification:	Warmy	water S _j	port Fisl	nery Co	mmuni	ty (WW	SF)						
Design Flow(s)	Daily N	Maximu	ım	4 N	MGD								
	Weekly	y Maxii	num	3.1	4 MGI)							
	Annual	l Avera	ge	1.6	55 MGI)							
Significant Industrial Loading?	B&G Foods, Inc., Color-Con and Uniroyal Global Engineered Products, LLC												
Operator at Proper Grade?	Separa	tion; C-	-Biolog	ical Sol	ids/Slu		Total P		l Growth orus; D–I				

Facility Description

The City of Stoughton serves a population of approximately 13,000 people as well as several significant industries (see list above). This facility is a conventional activated sludge plant consisting of fine screening, grit removal, primary settling, and biological treatment including Bio-P removal, final clarification and UV disinfection. Waste sludge is thickened in a dissolved air flotation thickener before being combined with primary sludge and anaerobically digested. The digested sludge is dewatered on a gravity belt thickener before storage. Land spreading on Department approved farmland is the final disposal option for the stored bio-solids. Back up chemical is available to treat side streams (or the forward flow if necessary) for Phosphorus. The collection system for the City of Stoughton is a separate sewer system with no constructed overflow points. The City is also covered under a "no exposure certification" for storm water. The Department has found the City to be in substantial compliance with its current permit.

In order to comply with the total phosphorus effluent limitations set forth in the Rock River TMDL, Stoughton will implement a Department-approved Adaptive Management Plan (Plan No. WQT-2017-0003) to pursue final phosphorus limit compliance. This effort will involve close partnerships with the Madison Metropolitan Sewerage District, Village of Oregon, City of Stoughton, WDNR Nevin Fish Hatchery, various Municipal Separate Storm Sewer Systems (MS4s) within the Yahara River watershed, County Land & Water Conservation Departments, NGOs, Lake Management Groups, and the agricultural community in an effort to reduce in-stream phosphorus concentration in the Yahara River watershed. Stoughtons's current permit expiring on June 30, 2019 was revoked and will be reissued to include the provisions outlined in the adaptive management plan.

The attached water quality based effluent limitation (WQBEL) recommendations by the Water Quality Bureau for this permit reissuance dated May 22, 2017 contains additional information regarding the discharge to the Yahara River. The WQBEL memo also include an outfall location map depicting the location of the Stoughton Wastewater Treatment Plant outfall.

Proposed Permit Reissuance

The Department anticipates an effective date of April 1, 2019 for the proposed permit. Therefore, to allow a full permit term of five years, the proposed permit's expiration date is March 31, 2024. If the permit reissuance process takes more or less time than anticipated, the permit's dates of effectiveness and expiration may be changed accordingly.

Sample Point Designation

	Sample Point Designation						
Sample Point Number	Point Averaging Period Treatment Description (as applicable)						
701	1.066 MGD (Average 7/1/14 to 6/30/17)	Influent: 24-hour flow proportional composite sampler located prior to the mechanical bar screen.					
001	0.937 MGD (Average 7/1/14 to 6/30/17)	Effluent: 24-hour flow proportional composite sampler intake located in the disinfection channel prior to UV disinfection. Grab samples after disinfection prior to discharge to Yahara River.					
002	140 dry U.S. Tons (Average 2014 – 2016)	Class B, liquid, anaerobically digested, dissolved air flotation and gravity belt thickened, liquid biosolids. Representative samples are taken from the sludge storage tank.					
101	N/A	In-plant Mercury: Collet a mercury field blank every day that mercury samples are collected at influent and effluent using the clean hands/dirty hands sample collection procedure from EPA method 1669.					

1 Influent - Proposed Monitoring

Sample Point Number: 701- INFLUENT

	Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes			
Flow Rate		MGD	Continuous	Continuous				
CBOD ₅		Mg/L	3/Week	24-Hr Flow Prop Comp				
BOD ₅ , Total		mg/L	3/Week	24-Hr Flow Prop Comp				
Suspended Solids, Total		mg/L	3/Week	24-Hr Flow Prop Comp				
Mercury, Total		ng/L	Quarterly	24-Hr Flow	See subsection 1.2.1.1 in the permit for mercury			

Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
Recoverable				Prop Comp	monitoring requirements.		

Changes from Previous Permit and Explanation of Monitoring Requirements

No Changes. Standard influent monitoring parameters and frequencies for a Major municipal treatment facility of this size. Quarterly influent mercury monitoring is required per NR 106.145(3)(a)2, Wis. Adm. Code, for municipal major WWTF's with actual flows greater than 1.0 MGD.

2 Inplant - Proposed Monitoring and Limitations

Sample Point Number: 101- FIELD BLANK for Hg MONITORING

Monitoring Requirements and Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes	
Mercury, Total Recoverable		ng/L	Quarterly	Blank	See subsection 2.2.1.1 in the permit for mercury monitoring requirements.	

Changes from Previous Permit & Explanation Monitoring Requirements

No changes from previous permit. A mercury field blank shall be collected using the Clean Hands/Dirty Hands sample collection procedure excerpted from EPA Method 1669 for every day that mercury influent and effluent samples are collected.

3 Surface Water - Proposed Monitoring and Limitations

Sample Point Number: 001- EFFLUENT to YAHARA RIVER

	Monitoring Requirements and Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
Flow Rate		MGD	Continuous	Continuous			
CBOD5	Weekly Avg	33 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect May through October annually.		
CBOD5	Weekly Avg	40 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect November through April annually.		
CBOD5	Monthly Avg	25 mg/L	3/Week	24-Hr Flow Prop Comp			
CBOD5	Weekly Avg	454 lbs/day	3/Week	Calculated	Limit in effect May through October annually.		
Suspended Solids, Total	Weekly Avg	40 mg/L	3/Week	24-Hr Flow Prop Comp			

Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
Suspended Solids, Total	Monthly Avg	30 mg/L	3/Week	24-Hr Flow Prop Comp			
Suspended Solids, Total	Weekly Avg	567 lbs/day	3/Week	Calculated	Limit in effect January, March, May, July, August, October and December annually.		
Suspended Solids, Total	Weekly Avg	625 lbs/day	3/Week	Calculated	Limit in effect February annually.		
Suspended Solids, Total	Weekly Avg	590 lbs/day	3/Week	Calculated	Limit in effect April, June, September and November annually.		
Suspended Solids, Total	Monthly Avg	402 lbs/day	3/Week	Calculated	Limit in effect January, March, May, July, August, October and December annually.		
Suspended Solids, Total	Monthly Avg	444 lbs/day	3/Week	Calculated	Limit in effect February annually.		
Suspended Solids, Total	Monthly Avg	419 lbs/day	3/Week	Calculated	Limit in effect April, June, September and November annually.		
pH Field	Daily Min	6.0 su	3/Week	Grab			
pH Field	Daily Max	9.0 su	3/Week	Grab			
Dissolved Oxygen	Daily Min	6.0 mg/L	3/Week	Grab	Limit in effect May through October annually.		
Fecal Coliform	Geometric Mean - Monthly	400 #/100 ml	2/Week	Grab	Limit in effect May through October annually.		
Fecal Coliform	Geometric Mean - Wkly	780 #/100 ml	2/Week	Grab	Limit in effect May through October annually.		
Nitrogen, Ammonia Variable Limit		mg/L	3/Week	24-Hr Flow Prop Comp	Using the daily effluent pH result, look up the daily maximum variable ammonia limit from the pH dependent table at subsection 3.2.1.2 in the permit. Report the variable limit in the Nitrogen, Ammonia Variable Limit column of the eDMR.		

Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
Nitrogen, Ammonia (NH3-N) Total	Daily Max - Variable	mg/L	3/Week	24-Hr Flow Prop Comp	Report the daily maximum Ammonia result in the Nitrogen, Ammonia (NH3- N) Total column of the eDMR. Compare to daily maximum variable ammonia limit to determine compliance.		
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	18 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect October through March annually.		
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	11 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect April and May annually.		
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	28 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect June through September annually.		
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	28 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect June through March annually.		
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	20 mg/L	3/Week	24-Hr Flow Prop Comp	Limit in effect April and May annually.		
Phosphorus, Total	Monthly Avg	1.0 mg/L	3/Week	24-Hr Flow Prop Comp			
Phosphorus, Total	6-Month Avg	0.6 mg/L	3/Week	24-Hr Flow Prop Comp	This is an Adaptive Management (AM) interim limit that goes into effect beginning November 1, 2020. See subsection 5.1 for the AM interim limit compliance schedule and subsection 3.2.1.3 in the permit for averaging periods and compliance determination.		
Phosphorus, Total		lbs/day	3/Week	Calculated	Calculate the daily mass discharge of phosphorus in lbs/day on the same days phosphorus sampling occurs.		
Mercury, Total Recoverable	Daily Max	3.2 ng/L	Quarterly	Grab	This is an Alternative Mercury Effluent Limit. See subsections 3.2.1.8 in the permit for Mercury Variance information, 3.2.1.9 for Mercury		

	Monitoring Requirements and Limitations							
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes			
					Monitoring Requirements and 5.2 for the mercury variance compliance schedule.			
Acute WET	Daily Max	1.0 TUa	See Listed Qtr(s)	24-Hr Flow Prop Comp	See subsection 3.2.1.11 in the permit for whole effluent toxicity (WET) testing monitoring dates and WET requirements.			
Chronic WET	Monthly Avg	3.0 TUc	See Listed Qtr(s)	24-Hr Flow Prop Comp	See subsection 3.2.1.11 in the permit for whole effluent toxicity (WET) testing monitoring dates and WET requirements.			
Chloride		mg/L	4/Month	24-Hr Flow Prop Comp	Monitoring Only - January 1, 2022 through December 31, 2022. Samples shall be collected on four consecutive days one week per month. See subsection 3.2.1.10 in the permit for chloride monitoring requirements.			
Nitrogen, Total Kjeldahl		mg/L	Quarterly	24-Hr Flow Prop Comp	Monitoring Only			
Nitrogen, Nitrite + Nitrate Total		mg/L	Quarterly	24-Hr Flow Prop Comp	Monitoring Only			
Nitrogen, Total		mg/L	Quarterly	Calculated	Monitoring Only			

Changes from Previous Permit

Stoughton's reissued permit will now contain weekly average ammonia nitrogen limits of 20 mg/L for April through May and 28 mg/L for June through March. Monthly average limits of 11 mg/L for April through May, 28 mg/L for June through September and 18 mg/L for October through March will also apply. The current permit contains only daily maximum ammonia nitrogen limits that vary based on effluent pH. The reissued permit will have a new fecal coliform limit of 780 #/100 ml as a weekly geometric mean, effective May 1 through September 30 annually that is in addition to the current fecal coliform limit of 400 #/100 ml as a monthly geometric mean. Total phosphorus (TP) mass limits calculated for the Rock River total maximum daily load (TMDL) are recommended and were to go into effect per a phosphorus compliance schedule contained in the current permit; however, Stoughton has requested and the Department has approved a plan to implement a watershed adaptive management approach under s. NR 217.18, Wis. Adm. Code, as a means for Stoughton to achieve compliance with the phosphorus water quality standards in s. NR 102.06, Wis. Adm. Code. This adaptive management plan is a partnership between the City of Stoughton, City of Madison, Village of Oregon and the Wisconsin DNR Nevin Fish Hatchery plus various municipal separate storm sewer system (MS4s) within the Yahara River action area as defined in the adaptive management plan. An adaptive management TP interim limit of 0.6

mg/L will apply beginning November 1, 2020 per a compliance schedule, while a 1.0 mg/L monthly average TP limit applies on the permit effective date. Stoughton's current permit has an alternative phosphorus limit of 1.3 mg/L as a monthly average. Stoughton has applied for a continuation of a variance from the water quality standard for mercury based on the wildlife criterion of 1.3 ng/L as a monthly average. If approved by EPA a daily maximum Alternative Mercury Effluent Limit (variance limit) of 3.2 ng/L will apply on the permit effective date, Stoughton will be required to implement an approved mercury pollutant minimization program (PMP) plan and submit annual mercury progress reports per a Mercury PMP compliance schedule. The reissued permit will require quarterly monitoring of total nitrogen parameters (total kjeldahl nitrogen, nitrite + nitrate nitrogen and total nitrogen).

Explanation of Limits and Monitoring Requirements

Water Quality Based Limits and WET Requirements and Disinfection

CBOD₅, Total Suspended Solids (TSS) Dissolved Oxygen (DO) and pH

No changes are recommended in the permit limitations for CBOD₅, Total Suspended Solids (concentration and TMDL mass), Dissolved Oxygen (DO) and pH. Because the reference effluent flow rates and receiving water characteristics have not changed, limitations for these water quality characteristics do not need to be re-evaluated at this time.

Disinfection – Seasonal disinfection is required May through October and is accomplished using ultra-violet (UV) light.

Fecal Coliform – The current permit has a fecal coliforms limit of 400 #/100 ml as a monthly geometric mean that is being retained in the reissued permit. Due to recent revisions to ch. NR 106 (effective September 1, 2016), whenever a monthly average limitation is determined necessary to protect water quality, a weekly average limit shall be calculated using procedures specified in s. NR 106.07(3)(e)4. Based on these calculations a fecal coliforms limit of 780 #/100 ml as a weekly geometric mean shall be included in the proposed permit.

Ammonia Nitrogen – Current acute and chronic ammonia toxicity criteria for the protection of aquatic life are included in Tables 2C and 4B of ch. NR 105, Wis. Adm. Code (effective March 1, 2004). Subchapter IV of ch. NR 106 establishes the procedure for calculating water quality based effluent limitations (WQBELs) for ammonia (effective March 1, 2004). Acute (daily maximum) ammonia limits are a function of receiving stream classification and effluent pH at the time of discharge. The maximum reasonably expected pH of Stoughton's effluent is 7.7 s.u. (standard pH units), which yields a computed daily maximum limit of 27.91 mg/L (28 mg/L, rounded). However, Stoughton's reissued permit will once again contain variable ammonia limits that vary with effluent pH. Weekly and monthly average ammonia limits were calculated in the May 22, 2017 WQBEL memo for Spring (April through May), Summer (June through September) and Winter (October through March). The calculated limits were compared to the 4-day (weekly) and 30-day (monthly) Upper 99th Percentiles (P99s) of ammonia data collected during the current permit term. The only period of months that showed a reasonable potential to exceed the calculated limits were the weekly and monthly average limits for April through May (spring). The 4-day P99 of 20.64 mg/L exceeded the calculated limit of 19.78 mg/L and therefore a weekly average limit of 20 mg/L (rounded) shall be included in the reissued permit for spring. The 30-day P99 was 14.53 mg/L, which exceeded the calculated limitation of 11.22 mg/L so a monthly average limit of 11 mg/L (rounded) will also apply.

Expression of Limits

Revisions to ch. NR 106, require weekly average and monthly average limits 1) whenever a daily maximum limitation is determined necessary to protect water quality or 2) the calculated weekly average and monthly average limit (regardless of reasonable potential), whichever is more restrictive. Since a daily maximum limit of 28 mg/L was determined to be necessary for all of the periods of months analyzed (spring, summer and winter) weekly average and monthly average limits for summer (June through September) were both set equal to the daily maximum limit of 28 mg/L. For winter (October through March) since a daily maximum limit of 28 mg/L was determined to be necessary the weekly average ammonia limit for winter was set equal to 28 mg/L. The calculated monthly average ammonia limit for winter was 18 mg/L, which is more stringent than the daily maximum limit so the monthly average limit was set equal to 18 mg/L.

Phosphorus – Phosphorus requirements are based on the Phosphorus Rules that became effective December 1, 2010 as detailed in chs. NR 102 Water Quality Standards and NR 217 Effluent Standards and Limitations for Phosphorus. See

http://dnr.wi.gov/topic/surfacewater/phosphorus.html for details regarding the administrative rules for phosphorus discharges.

As noted below, total phosphorus mass limits based on the Rock River Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) have been determined necessary for the Stoughton WWTF. However, Stoughton has requested and the Department has approved a plan to implement a watershed adaptive management approach under s. NR 217.18, as a means for Stoughton to achieve compliance with the phosphorus water quality standards in s. NR 102.06, and the Rock River TMDL. The phosphorus limitations and conditions in the proposed permit reflect the approved adaptive management (AM) plan No. WQT-2017-0003. AM Plan No. WQT-2017-0003 is a partnership between the City of Stoughton, Village of Oregon, WDNR Nevin Fish Hatchery, Madison Metropolitan Sewage District and various Municipal Separate Storm Sewer Systems (MS4s) located in the Yahara River watershed. The AM Plan identifies the Yahara River action area, which encompasses the entire Yahara River watershed, where watershed projects shall be implemented to reduce phosphorus and total suspended solids loadings from point and non-point sources of these pollutants.

At the end of the first permit, the total minimum phosphorus reduction required is 5,329 lbs/yr. Stoughton's portion of the total reduction is 10 lbs/yr.

The Adaptive Management Plan was written such that Madison Met is solely responsible for coordinating in-stream monitoring and submittal of all required data and annual reports for all entities that are participating in the Yahara River Basin AM Plan; this includes the City of Stoughton, Village of Oregon, WDNR Nevin Fish Hatchery, and various MS4 partners. Each entity has a signed an Intergovernmental Agreement (IGA) indicating more details on roles and responsibilities. This IGA as well as the Memorandum of Understanding (MOU) that the Department signed with Madison Met can be found in the appendix of the Adaptive Management Plan.

Total phosphorus mass limits were calculated to comply with the Rock River TMDL, and were derived consistent with the assumptions and requirements of the EPA-approved waste load allocation for the Rock River. Limits were determined using the code changes and the provision of the TMDL. For informational purposes, the final TMDL mass limits are presented in the following table:

Total Phosphorus Effluent Limitations

Month	Monthly Ave Total P Effluent Limit (lbs/day)
Jan	4.3
Feb	5.6
March	4.9
April	5.3
May	5.2
June	5.3
July	5.1
Aug	4.6
Sept	4.9
Oct	4.1
Nov	4.0
Dec	3.9

Mercury – Actual flow is greater than 1.0 MGD so the quarterly mercury influent, effluent and field blank monitoring requirements for Major WWTFs in Subchapter III, NR 106.145, apply. Mercury effluent and field blank data generated during the current permit term were evaluated for sampling and analysis requirements in accordance with ss. NR 106.145 (9) and (10). The 30-day P99 of effluent results calculated using the procedures in s. NR 106.05(5), was 1.74 ng/L, which

is greater than the water quality standard for the protection of wildlife of 1.3 ng/L (the most stringent criterion for this substance), so a limit is necessary (WQBEL). However, s. NR 106.145(4), provides for a variance from water quality standards for this substance in light of its presence in the environment and Stoughton has requested this variance. An Alternative Mercury Effluent Limit (AMEL) is established at the calculated 1-day P99 of 3.2 ng/L (rounded). The permit requires Stoughton to continue quarterly influent, field blank and effluent monitoring, maintain mercury discharge concentrations at or below 3.2 ng/L as a daily maximum and implement a Pollutant Minimization Program designed to minimize mercury influent to the plant with the ultimate goal of meeting the unvaried mercury limit.

WET – Whole effluent toxicity (WET) testing requirements and limits (if applicable) are determined in accordance with ss. NR 106.08 and NR 106.09, as revised August 2016. (See the current version of the Whole Effluent Toxicity Program Guidance Document and checklist and WET information, guidance and test methods at http://dnr.wi.gov/topic/wastewater/wet.html). Based on a reasonable potential analysis in the May 22, 2017 WQBEL memo an acute WET limit of 1.0 TUa (daily maximum) and a chronic WET limit of 3.0 TUc (monthly average) are required in Stoughton's reissued permit. A minimum of annual acute and chronic monitoring is required because acute and chronic WET limits are required. See subsection 3.2.1.10 in the permit for WET testing dates and WET requirements.

Toxics/Metals – Subsection NR 200.06(1)(a), Table 1, establishes minimum application monitoring requirements for discharges to surface waters. For a major municipal discharger that monitoring includes a Priority Pollutant scan (PPS) for toxic parameters, including metals. These data were reviewed in the WQBEL memo dated May 22, 2017. Chromium 6+ and Bis(2-ethylhexyl)phthalate were detected at levels greater than 1/5 of the calculated daily maximum limits and permit limitations were recommended for both substances. However, Stoughton submitted two additional samples for both parameters and the average effluent concentration for Chromium 6+ dropped to below 1/5 of the daily maximum limit and therefore no limit is necessary. For Bis(2-ethylhexyl)phthalate, the two sample results were both non-detects leading to the conclusion that the original result that triggered the need for a limit is unrepresentative of the discharge and limits are no longer recommended for the parameter. Many of the other substances in the PPS were below levels of detection. No additional limitations are proposed in the reissued permit.

Chloride – Acute and chronic chloride toxicity criteria for the protection of aquatic life are included in Tables 1 and 5 of ch. NR 105. Subchapter VII of ch. NR 106 establishes the procedure for calculating water quality based effluent limitations (WQBELs) for chloride. The calculated 1-day Upper 99th Percentile (566.58 mg/L) of Stoughton's reported chloride effluent concentrations is less than the acute (daily maximum) chloride limit (1,514 mg/L) and the 4-day Upper 99th Percentile (483.99 mg/L) is less than the chronic (weekly average) chloride limit (1,207.28 mg/L), so chloride limits are not needed in the permit (WQBEL). Four samples per month (on consecutive days) chloride monitoring is required in calendar year 2022 to collect data for the next permit reissuance process.

Thermal – Requirements for Temperature are included in NR 102 Subchapter II Water Quality Standards for Temperature and NR 106 Subchapter V Effluent Limitations for Temperature. Thermal discharges must meet the Public Health criterion of 120° F and the Fish & Aquatic Life criteria which are established to protect aquatic communities from lethal and sub-lethal thermal effects. The lowest daily maximum effluent limitation for temperature is 100° F compared to the highest daily maximum effluent temperature of 74° F and the lowest weekly average effluent temperature limitation is 88° F compared to the highest weekly average effluent temperature of 74° F, so temperature limitations are unnecessary. One year of effluent temperature monitoring is recommended in the WQBEL memo; however, since the limits are so much higher than the measured temperatures no monitoring will be required.

Total Nitrogen Monitoring (NO2+NO3, TKN and Total N) – Based on the "Guidance for Total Nitrogen Monitoring in WPDES Permits" dated October 2012, quarterly effluent monitoring for Total Nitrogen is required for municipal majors discharging to the Mississippi River Basin.

4 Land Application - Proposed Monitoring and Limitations

	Municipal Sludge Description							
Sample Point	Sludge Class (A or B)	Sludge Type (Liquid or Cake)	Pathogen Reduction Method	Vector Attraction Method	Reuse Option	Amount Reused/Disposed (Dry Tons/Year)		
002	В	Liquid	Anaerobic Digestion	Injection	Land Application	140 dry U.S. Tons (Avg. 2014 – 2016)		

Does sludge management demonstrate compliance? Yes

Is additional sludge storage required? No

Is Radium-226 present in the water supply at a level greater than 2 pCi/liter? No

If yes, special monitoring and recycling conditions will be included in the permit to track any potential problems in landapplying sludge from this facility

Is a priority pollutant scan required? Not applicable, design flow of 1.65 MGD is less than 5 MGD.

Priority pollutant scans are required once every 10 years at facilities with design flows between 5 MGD and 40 MGD, and once every 5 years if design flow is greater than 40 MGD.

Sample Point Number: 002-SLUDGE

Monitoring Requirements and Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes	
PCB Total Dry Wt	Ceiling	50 mg/kg	Once	Composite	Jan 1, 2020 - Dec 31, 2020	
PCB Total Dry Wt	High Quality	10 mg/kg	Once	Composite	Jan 1, 2020 - Dec 31, 2020	
Solids, Total		Percent	Annual	Composite		
Arsenic Dry Wt	Ceiling	75 mg/kg	Annual	Composite		
Arsenic Dry Wt	High Quality	41 mg/kg	Annual	Composite		
Cadmium Dry Wt	Ceiling	85 mg/kg	Annual	Composite		
Cadmium Dry Wt	High Quality	39 mg/kg	Annual	Composite		
Copper Dry Wt	Ceiling	4,300 mg/kg	Annual	Composite		
Copper Dry Wt	High Quality	1,500 mg/kg	Annual	Composite		
Lead Dry Wt	Ceiling	840 mg/kg	Annual	Composite		
Lead Dry Wt	High Quality	300 mg/kg	Annual	Composite		
Mercury Dry Wt	Ceiling	57 mg/kg	Annual	Composite		
Mercury Dry Wt	High Quality	17 mg/kg	Annual	Composite		
Molybdenum Dry Wt	Ceiling	75 mg/kg	Annual	Composite		
Nickel Dry Wt	Ceiling	420 mg/kg	Annual	Composite		

Monitoring Requirements and Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes	
Nickel Dry Wt	High Quality	420 mg/kg	Annual	Composite		
Selenium Dry Wt	Ceiling	100 mg/kg	Annual	Composite		
Selenium Dry Wt	High Quality	100 mg/kg	Annual	Composite		
Zinc Dry Wt	Ceiling	7,500 mg/kg	Annual	Composite		
Zinc Dry Wt	High Quality	2,800 mg/kg	Annual	Composite		
Nitrogen, Total Kjeldahl		Percent	Annual	Composite		
Nitrogen, Ammonium (NH4-N) Total		Percent	Annual	Composite		
Phosphorus, Total		Percent	Annual	Composite		
Phosphorus, Water Extractable		% of Tot P	Annual	Composite		
Potassium, Total Recoverable		Percent	Annual	Composite		

Changes from Previous Permit & Explanation of Limits and Monitoring Requirements

New time frame for PCB monitoring is calendar year 2019. Requirements for land application of municipal sludge are determined in accordance with ch. NR 204 Wis. Adm. Code. Ceiling and high quality limits for metals in sludge are specified in s. NR 204.07(5). Requirements for pathogens are specified in s. NR 204.07(6) and in s. NR 204.07 (7) for vector attraction requirements. Limitations for PCBs are addressed in s. NR 204.07(3)(k).

5 Compliance Schedules

5.1 Adaptive Management Interim Limit Compliance Update

Required Action	Due Date
Progress Report: Submit a progress report on the ability of the wastewater treatment facility to consistently meet the Adaptive Management interim effluent limit of 0.6 mg/L as a 6-month seasonal average with averaging periods of May through October and November through April.	11/30/2019
Comply with Adaptive Management Interim Limit: The Adaptive Management interim effluent limit of 0.6 mg/L as a six-month average goes into effect. The averaging periods are May through October and November through April. Compliance with the 6-month average limit is evaluated at the end of each 6-month period on April 30 and October 31 annually.	11/01/2020

Explanation of Adaptive Management Interim Limit Compliance Update Schedule

This compliance schedule provides Stoughton until November 1, 2020 to comply with the phosphorus adaptive management limit of 0.6 mg/L as a 6-month seasonal average. A progress report on the facility's ability to meet the interim limit is required for the first year of the permit.

5.2 Mercury Pollutant Minimization Program

As a condition of the variance to the water quality based effluent limitation(s) for mercury granted in accordance with s. NR 106.145(6), Wis. Adm. Code, the permittee shall perform the following actions.

Required Action	Due Date
Annual Mercury Progress Reports: Submit an annual mercury progress report. The annual mercury progress report shall:	01/31/2020
Indicate which mercury pollutant minimization activities or activities outlined in the approved Pollutant Minimization Plan have been implemented;	
Include an analysis of trends in monthly and annual total effluent mercury concentrations based on mercury sampling; and	
Include an analysis of how influent and effluent mercury varies with time and with significant loading of mercury such as loads from industries into the collection system.	
The first annual mercury progress report is to be submitted by the Due Date.	
Annual Mercury Progress Report #2: Submit a mercury progress report as defined above.	01/31/2021
Annual Mercury Progress Report #3: Submit a mercury progress report as defined above.	01/31/2022
Annual Mercury Progress Report #4: Submit a mercury progress report as defined above.	01/31/2023
Final Mercury Report: Submit a final report documenting the success in reducing mercury concentrations in the effluent, as well as the anticipated future reduction in mercury sources and mercury effluent concentrations. The report shall summarize mercury pollutant minimization activities that have been implemented during the current permit term and state which, if any, pollutant minimization activities from the approved pollutant minimization plan were not pursued and why. The report shall include an analysis of trends in monthly and annual total effluent mercury concentrations based on mercury sampling during the current permit term. The report shall also include an analysis of how influent and effluent mercury varies with time and with significant loading of mercury such as loads from industries into the collection system.	09/30/2023
If the permittee intends to re-apply for a mercury variance per s. NR 106.145, Wis. Adm. Code, for the reissued permit, a detailed pollutant minimization plan outlining the pollutant minimization activities proposed for the upcoming permit term should be submitted along with the final report.	
Annual Mercury Reports After Permit Expiration: In the event that this permit is not reissued on time, the permittee shall continue to submit annual mercury reports each year covering pollutant minimization activities implemented and mercury concentration trends.	

5.3 Explanation of Mercury Pollutant Minimization Program Schedule

Stoughton has applied for a variance from the mercury water quality criterion for the protection of wildlife (1.3 ng/L). As conditions of receiving a mercury variance Stoughton shall maintain effluent quality at or below an alternative mercury effluent (variance) limit of 3.2 ng/L, implement the "Mercury Pollutant Minimization Program (PMP) Plan" dated June 7, 2017 and submit annual mercury progress reports as described in the compliance schedule above.

Special Reporting Requirements

The City of Stoughton in collaboration with Madison Metropolitan Sewerage District, Village of Oregon, and the WDNR Nevin Fish Hatchery have requested and the Department approved a plan to implement a watershed adaptive management

approach. This proposed permit aligns the timeline of permit reissuance and expiration along with adaptive management compliance dates for these facilities.

Attachments:

Water Quality Based Effluent Limits (WQBEL) - May 22, 2017

WET Checklist Summary - May 22, 2017, WQBEL Memo, Page 17

Map - May 22, 2017, WQBEL Memo, Page 20

Adaptive Management Request Form - June 15, 2017

Madison Metropolitan Sewerage District Adaptive Management Plan – January 2017

Madison Metropolitan Sewerage District Adaptive Management Plan Amendment – February 2017

Stoughton Mercury Pollutant Minimization Program (PMP) Plan – June 7, 2017

Stoughton Facility Specific Mercury Variance Data Sheet – July 28, 2017

Substantial Compliance Determination - April 10, 2017

Public Notice -

Proposed Expiration Date:

March 31, 2024

Prepared By:

Phillip Spranger, Wastewater Specialist

Date: October 22, 2018

cc: Amy Garbe

CORRESPONDENCE/MEMORANDUM

DATE:

May 22, 2017

FILE REF: 3200

TO:

Phillip Spranger - SCR/Fitchburg

FROM:

Adrian Stocks - WY/3

SUBJECT:

Houl for a Water Quality-Based Effluent Limitations for the City of Stoughton

Wastewater Treatment Facility WPDES Permit No. WI-0020338-09

This is in response to your request for an evaluation of the need for water quality-based effluent limitations using Chapters NR 102, 104, 105, 106, 207, 210 and 217 of the Wisconsin Administrative Code (where applicable), for the discharge from the City of Stoughton wastewater treatment facility in Dane County. This municipal wastewater treatment facility (WWTF) discharges to the Yahara River located in the Yahara River and Lake Kegonsa Watershed in the Lower Rock River Basin. This discharge is included in the Rock River TMDL as approved by EPA. The evaluation of the permit recommendations is discussed in more detail in the attached report.

No changes are recommended in the permit limitations for CBOD₅, Total Suspended Solids, Dissolved Oxygen, and, pH. Based on our review, the following recommendations are made on a chemical-specific basis:

Outfall 001

Outlan 001	Daily	Daily	Weekly	Monthly	Six-Month	Footnotes
Parameter	Maximum	Minimum	Average	Average	Average	
CBOD ₅						
May-October			33 mg/L 454 lbs/day	25 mg/L		
November-April			40 mg/L	25 mg/L		
TSS			40 mg/L	30 mg/L		1
pН	9.0 s.u.	6.0 s.u.				
Dissolved Oxygen						
May-October		6.0 mg/L				
Ammonia Nitrogen						2,3
April-May	28 mg/L		20 mg/L	11 mg/L		
June-September	28 mg/L		28 mg/L	28 mg/L		
October-March	28 mg/L		28 mg/L	18 mg/L		
Fecal Coliforms			780#/100 mL	400#/100 mL		2
(May – September)			(geometric mean)	(geometric mean)		
Chromium (+6)	32.04 μg/L		32.04 μg/L	32.04 μg/L		2
Bis(2-ethylhexyl)	33.92 μg/L		13.33 μg/L	13.33 μg/L		2.
phthalate						
Phosphorus				1.0 mg/L	0.6 mg/L	1
Mercury	1.3 ng/L					4
Temperature						5
Chloride						5

Footnotes:

1. Additional phosphorus and TSS mass limitations from the current permit and listed in attachment #1 are required in accordance with the wasteload allocations specified in the Rock River TMDL



- Monthly average Total Phosphorus mass limits are required as listed in the table on page 2.
- Monthly and weekly average TSS mass limits are required as listed in the table on page 2.
- 2. Additional limits needed to comply with s. NR 106.07(3), Wis. Adm. Code Expression of Limits are in **bold.**
- 3. pH variable ammonia limits (see table below) may be used in place of the 28 mg/L daily maximum limit:

Effluent pH s.u.	NH3-N Limit mg/L	Effluent pH s.u.	NH3-N Limit mg/L	Effluent pH s.u.	NH3-N Limit mg/L
$6.0 < pH \le 6.1$	110	$7.0 < pH \le 7.1$	72	$8.0 \le pH \le 8.1$	17
$6.1 < pH \le 6.2$	108	$7.1 < pH \le 7.2$	66	$8.1 \le pH \le 8.2$	14
$6.2 < pH \le 6.3$	106	$7.2 < pH \le 7.3$	59	$8.2 \le pH \le 8.3$	11
$6.3 < pH \le 6.4$	104	$7.3 < pH \le 7.4$	52	8.3 < pH ≤ 8.4	9.4
$6.4 < pH \le 6.5$	101	$7.4 < pH \le 7.5$	46	$8.4 < pH \le 8.5$	7.8
6.5 < pH ≤ 6.6	98	7.5 < pH ≤ 7.6	40	$8.5 < pH \le 8.6$	6.4
$6.6 < pH \le 6.7$	94	$7.6 < pH \le 7.7$	34	$8.6 < pH \le 8.7$	5.3
$6.7 \le pH \le 6.8$	89	$7.7 < pH \le 7.8$	29	$8.7 \le pH \le 8.8$	4.4
6.8 < pH ≤ 6.9	84	$7.8 < pH \le 7.9$	24	8.8 ≤ pH ≤ 8.9	3.7
$6.9 < pH \le 7.0$	78	$7.9 < pH \le 8.0$	20	$8.9 < pH \le 9.0$	3.1

- 4. This is the water quality-based effluent limitation for mercury. An alternative effluent limitation of 3.3 ng/L (equal to the 1-day P₉₉ of representative data) as a daily maximum may be included in the permit in place of the water quality-based effluent limit if the mercury variance application that was submitted is approved by EPA.
- 5. Monitoring in the fourth year of the permit term

Along with the chemical-specific recommendations mentioned above, the need for acute and chronic whole effluent toxicity (WET) monitoring and limits has also been evaluated for the discharge from the Stoughton WWTF. Following the guidance provided in the Department's November 1, 2016 Whole Effluent Toxicity Program Guidance Document - Revision #11, annual acute WET testing is recommended and annual chronic WET testing is recommended in the reissued permit. Tests should be done in rotating quarters, in order to collect seasonal information about this discharge. WET testing shall continue after the permit expiration date (until the permit is reissued).

According to the requirements specified in s. NR 106.08, Wis. Adm. Code, acute and chronic WET limits are required. The acute WET limit should be expressed as 1.0 TUa as a daily maximum in the effluent limits table of the permit. The chronic WET limit should be expressed as 3.0 TUc as a monthly average in the effluent limits table of the permit.

Sampling WET concurrently with any chemical-specific toxic substances is recommended. Chronic testing shall be performed using a dilution series of 100%, 75%, 50%, 25% & 12.5%. The Instream Waste Concentration to assess chronic test results is 33%. The primary control and dilution water used in WET tests conducted on Outfall 001 shall be a grab sample collected from the Yahara River.

Please consult the attached report for details regarding the above recommendations. If there are any questions or comments, please contact Jake Zimmerman at (608) 275-3230 or Jacob.Zimmerman@wisconsin.gov.

Attachments:

1. Water Quality-Based Effluent Limits for the Stoughton WWTF

2. Thermal Effluent Limit Calculation Table

3. Site Map

PREPARED BY:

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Frail date: 5/22/17

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Water Quality-Based Effluent Limitations for the Stoughton Wastewater Treatment Facility

WPDES Permit No. WI-0020338

Prepared by: Jacob Zimmerman

PART 1 – BACKGROUND INFORMATION

Facility Description: The City of Stoughton wastewater treatment facility (WWTF) serves a population of approximately 12,350 people as well as several significant industries. This facility is a conventional activated sludge plant consisting of screening, grit removal, primary settling, and biological treatment including Bio-P removal, final clarification and UV disinfection. Waste sludge is thickened in a dissolved air flotation thickener before being combined with primary sludge and anaerobically digested. The digested sludge is dewatered on a gravity belt thickener before storage. Land spreading on Department approved farmland is the final disposal option for the stored bio-solids. Back up chemical is available to treat side streams (or the forward flow if necessary) for Phosphorus. The collection system for the Stoughton WWTF is a separate sewer system with no constructed overflow points.

Attachment #3 is a site map of the area showing the approximate location of Outfall 001.

Existing Permit Limitations: The current permit, expiring on June 30, 2019 includes the following effluent limitations.

30 51000 Biologic	Daily	Daily	Weekly	Monthly	Footnotes
Parameter	Maximum	Minimum	Average	Average	26-1-24 660-265
CBOD ₅					1
May-October			33 mg/L	25 mg/L	
			454 lbs/day		
November-April			40 mg/L	25 mg/L	
TSS			40 mg/L	30 mg/L	1, 2
pН	9.0 s.u.	6.0 s.u.			1
Dissolved Oxygen		6.0 mg/L			1
Fecal Coliforms				400#/100 mL	
(May – September)				(geometric	
Phosphorus				mean) 1.3 mg/L	3
				1.5 mg/L	
Ammonia Nitrogen					4
Mercury	3.3 ng/L				5
Chloride					6
Temperature					6
Total Kjeldahl					6
Nitrogen			•		
Nitrite + Nitrate					6
Total Nitrogen					6

Footnotes:

1. These limitations are not being evaluated as part of this review. Because the water quality criteria, reference effluent flow rates, and receiving water characteristics have not changed, limitations for these water quality characteristics do not need to be re-evaluated at this time.

2. Additional limits to comply with the Rock River TMDL are listed below

	Total Suspende	d Solids Efflu	ent Limitations	
Month	Monthly TSS WLA ¹ (tons/month)	Days Per Month	Monthly Ave TSS Effluent Limit ² (lbs/day)	Weekly Ave TSS Effluent Limit ³ (lbs/day)
Jan	6.23	31	402	567
Feb	6.21	28	444	625
March	6,23	31	402	567
April	6.28	30	419	590
May	6.23	31	402	567
June	6.28	30	419	590
July	6.23	31	402	567
Aug	6.23	31	402	567
Sept	6.28	30	419	590
Oct	6.23	31	402	567
Nov	6.28	30	419	590
Dec	6.23	31	402	567

3. Monthly mass limitations required by the Rock River TMDL include:

Control of the Contro	Total Phosphorus Effluent Limitations							
Month	Monthly Ave Total P Effluent Limit ² (lbs/day)							
Jan	4.3							
Feb	5.6							
March	4.9							
April	5.3							
May	5.2							
June	5.3							
July	5.1							
Aug	4.6							
Sept	4.9							
Oct	4.1							
Nov	4.0							
Dec	3.9							

4. Daily maximum ammonia limits are dependent upon pH and listed below:

	Daily Maximum Ammonia Limitations (mg/L)										
pН	Criterion	Limit	pH	Criterion	Limit	pН	Criterion	Limit			
6	54.99	109.98	7	36.09	72.19	8	8.41	16.82			
6.2	53.17	106.34	7.2	29.54	59.08	8.2	5.73	11.45			
6.4	50.53	101.06	7.4	22.97	45.94	8.4	3.88	7.77			
6.6	46.84	93.69	7.6	17.03	34.06	8.6	2.65	5.30			
6.8	42.00	83.99	7.8	12.14	24.28	8.8	1.84	3.69			
						9	1.32	2.65			

- 5. This is an alternate concentration limit in accordance with NR 106.145(5).
- 6. Monitoring only

Receiving Water Information:

- Name: Yahara River (WBIC 798300)
- Classification: Warmwater sport fish community, non-public water supply.
- Low Flow: The following 7-Q₁₀ and 7-Q₂ values are from USGS Station LR 43,5A, at the Stoughton Dam just upstream of where Outfall 001 is located. The Harmonic Mean has been estimated as recommended in *State of Wisconsin Water Quality Rules Implementation Plan* (Publ. WT-511-98)

$$7-Q_{10} = 21$$
cfs (cubic feet per second)

$$7-Q_2 = 41 \text{ cfs}$$

$$90-Q_{10} = 34.85 \text{ cfs}$$

Harmonic Mean Flow = 93.16 cfs

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7-Q ₁₀ (cfs)	97	79	76	46	54	27	24	33	32	36	100	120
$7-Q_2$ (cfs)	180	180	170	150	140	96	87	97	110	130	220	200

- Hardness = 257 mg/L as CaCO₃. This value represents the geometric mean of data from five WET tests which occurred between November 2014 and August 2016.
- % of low flow used to calculate limits: 25%
- Source of background concentration data: The numerical values are shown in the tables below. If no
 data is available, the background concentration is assumed to be negligible and a value of zero is used
 in the computations. Background data for calculating effluent limitations for Ammonia Nitrogen are
 described later.
- Multiple dischargers: There are no other dischargers to the Yahara River which would impact the mixing zone of Stoughton's outfall.
- Impaired water status: The Yahara River is listed as impaired for phosphorus and total suspended solids above and below the outfall to Lake Kegonsa.

Effluent Information:

• Design Flow Rate(s):

Annual average = 1.65 MGD (Million Gallons per Day)

For reference, the actual average flow from 2016 was 0.939 MGD.

• Hardness = 352 mg/L as CaCO₃. This value represents the geometric mean of four data points from August 9, 2016- September 15, 2016 as reported on the permit application.

• Effluent characterization: This facility is categorized as a major municipal discharger so the permit application required effluent sample analyses for all of the "priority pollutants" except for the Dioxins and Furans, plus Chloride and Hardness.

Sample Date	Chloride mg/L	Sample Date	Chloride mg/L	Sample Date	Chloride mg/L
01/03/2017	460	02/01/2017	410	03/01/2017	330
01/11/2017	440	02/06/2017	400	03/15/2017	400
01/17/2017	560	02/14/2017	350	03/21/2017	420
01/24/2017	380	02/22/2017	380	03/28/2017	400
		1-day P ₉₉ = :	566.58 mg/L		
		4-day P ₉₉ =4	483.99 mg/L		

Sample Date	Copper μg/L	Sample Date	Copper μg/L	Sample Date	Copper μg/L
08/29/2016	4.5	09/15/2016	5.8	09/29/2016	4.3
09/01/2016	4.5	09/19/2016	4.9	10/03/2016	5.8
09/06/2016	6.4	09/22/2016	4.2	10/06/2016	4.7
09/12/2016	5.5	09/26/2016	4.9		
		1-day P ₉₉ =	· 6.96 μg/L		
		4-day P ₉₉ =	5.94 μg/L		

Sample Date	Mercury ng/L	Sample Date	Mercury ng/L	Sample Date	Mercury ng/L
09/30/2014	0.76	09/22/2015	1.2	08/30/2016	1.3
12/09/2014	1.1	12/07/2015	2	11/03/2016	1.5
03/31/2015	2.6	03/02/2016	2.5	02/16/2017	1.8
05/18/2015	1.9	05/31/2016	1.2		
		1-day P ₉₉ =	3.46 ng/L		
		4-day P ₉₉ =	2.43 ng/L		
		30-day P ₉₉ =	= 1.89 ng/L		

- Effluent data for substances for which a single sample was analyzed is shown in the tables in Part 2 below, in the column titled "MEAN EFFL. CONC.".
- Water Source: City of Stoughton Utility
- Additives: The city uses chlorine and fluoride in the drinking water system. Alum is available to treat side streams (or the forward flow if necessary) for phosphorus at the wastewater treatment facility.

PART 2 – WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR TOXIC SUBSTANCES – EXCEPT AMMONIA NITROGEN

In general, permit limits for toxic substances are recommended whenever any of the following occur:

- 1. The maximum effluent concentration exceeds the calculated limit (s. NR 106.05(3), Wis. Adm. Code)
- 2. If 11 or more detected results are available in the effluent, the upper 99th percentile (or P₉₉) value exceeds the comparable calculated limit (s. NR 106.05(4), Wis. Adm. Code)
- 3. If fewer than 11 detected results are available, the mean effluent concentration exceeds 1/5 of the calculated limit (s. NR 106.05(6), Wis. Adm. Code)

The following tables list the water quality-based effluent limitations for this discharge along with the results of effluent sampling for all of the detected substances. All concentrations are expressed in term of micrograms per Liter (µg/L), except for hardness and chloride (mg/L) and mercury (ng/L).

Daily Maximum Limits based on Acute Toxicity Criteria (ATC)

RECEIVING WATER FLOW = 16.8 cfs, $(1-Q_{10})$ (estimated as 80% of 7- Q_{10}).

	REF.		MAX.	1/5 OF	MEAN		1-day
	HARD.*	ATC	EFFL.	EFFL.	EFFL.	1-day	MAX.
SUBSTANCE	mg/L		LIMIT**	LIMIT	CONC.	P ₉₉	CONC.
Arsenic		339.80	679.60	135.92	<1.0		
Cadmium	352	43.65	87.30	17.46	<0.14		
Chromium (+3)	301	4445.84	8891.68	1778.34	0.76		
Chromium (+6)		16.02	32.04	6.41	11		
Copper	352	50.87	101.74			6.9 6	6.4
Lead	352	360.70	721.40	144.28	<1.5		
Mercury - ng/L		830	166			3.46	2.6
Nickel	268	1048.88	2097.76	419.55	1.3		
Zinc	333	344.68	689.36	137.87	26		
Cyanide		45.78	91.56	18.31	0.028		
Chloride - mg/L		757	1514			566.58	560
Bis(2-ethylhexyl) phthalate***		1	33.92	6.78	11		

^{*} The indicated hardness may differ from the effluent hardness because the effluent hardness exceeded the maximum range in ch. NR 105 over which the acute criteria are applicable. In that case, the maximum of the range is used to calculate the criterion.

^{**} The 2 x ATC method of limit calculation yields a more restrictive limit than consideration of ambient concentrations and 1-Q₁₀ flow rates per the changes to s. NR 106.07(3), Wis. Adm. Code, effective 09/01/2016.

***The limit is set equal to the secondary acute value since no ATC is available for this substance pursuant s. NR 106.06 (3) (b) 2, Wis. Adm. Code.

Weekly Average Limits based on Chronic Toxicity Criteria (CTC)

RECEIVING WATER FLOW = 5.25 cfs ($\frac{1}{4}$ of the $7-Q_{10}$)

REF.		MEAN	WEEKLY	1/5 OF	MEAN	8.45.8.91
HARD.*	CTC	BACK-	AVE.	EFFL.	EFFL.	4-day
mg/L		GRD,	LIMIT	LIMIT	CONC.	P99
	152.20		465.19	93.04	<1.0	
175	3.82		11.68	2.34	< 0.14	
257	286.20		874.74	174.95	0.76	
	10.98		33.56	6.71	11	
257	23.21		70.94			5.94
257	69.72		213.09	42.62	<1.5	
***************************************	440		1340			2.43
257	115.99		354.51	70.90	1.3	
	5.00		15.28	3.06	<2.0	
257	274.81		839.93	167.99	26	
	11.47		35.06	7.01	0.028	
	395		1207.28			483.99
	426		12 22	2.67	11	
	HARD.* mg/L 175 257 257 257 257	REF. HARD.* CTC mg/L 152.20 175 3.82 257 286.20 10.98 257 23.21 257 69.72 440 257 115.99 5.00 257 274.81 11.47	REF. HARD.* CTC BACK- mg/L 152.20 175 3.82 257 286.20 10.98 257 23.21 257 69.72 440 257 115.99 5.00 257 274.81 11.47 395	HARD.* CTC BACK-GRD. AVE. LIMIT 152.20 465.19 175 3.82 11.68 257 286.20 874.74 10.98 33.56 257 23.21 70.94 257 69.72 213.09 440 1340 257 115.99 354.51 5.00 15.28 257 274.81 839.93 11.47 35.06 395 1207.28	REF. HARD.* CTC MEAN BACK- AVE. EFFL. EFFL. LIMIT LIMIT LIMIT mg/L 152.20 465.19 93.04 175 3.82 11.68 2.34 257 286.20 874.74 174.95 10.98 33.56 6.71 257 23.21 70.94 257 69.72 213.09 42.62 440 1340 257 115.99 354.51 70.90 5.00 15.28 3.06 257 274.81 839.93 167.99 11.47 35.06 7.01 395 1207.28	HARD.* CTC BACK-GRD. AVE. LIMIT EFFL. LIMIT EFFL. CONC. 152.20 465.19 93.04 <1.0

^{*} The indicated hardness may differ from the receiving water hardness because the receiving water hardness exceeded the maximum range in ch. NR 105, Wis. Adm. Code, over which the chronic criteria are applicable. In that case, the maximum of the range is used to calculate the criterion.

Monthly Average Limits based on Wildlife Criteria (WC)

RECEIVING WATER FLOW = 8.71 cfs (1/4 of the 90-Q₁₀)

Mercury (ng/L)	1.30	>1.30	1.30		00130.	1.89
SUBSTANCE	WC	BACK- GRD	04.6904063656900666835664.60	EFFL.	EFFL.	30-day Poo
Scholar Control of the Control of th	100-12-100-05-100-	MEAN	MO'LY	1/5 OF	MEAN	

Monthly Average Limits based on Human Threshold Criteria (HTC)

RECEIVING WATER FLOW = 23.29 cfs (¼ of the Harmonic Mean)

SUBSTANCE	HTC	MEAN BACK- GRD.	MO'LY AVE. LIMIT	1/5 OF EFFL. LIMIT	MEAN EFFL. CONG
Antimony	373		3776	755	0.32
Cadmium	370		3745	749	<0.14
Chromium (+3)	3.82E+06		38648172	7729634	0.76
Chromium (+6)	7636		77296	15459	11
Lead	140		1417	283	<1.5
Mercury (ng/L)	1.50		15.2	3.0	1.62
Nickel	43000		435273	87055	1.3
Selenium	2600		26319	5264	<2.0
Cyanide	9300		94140	18828	0.028

Monthly Average Limits based on Human Cancer Criteria (HCC)

RECEIVING WATER FLOW = 23.29 cfs (1/4 of the Harmonic Mean)

				,	
SUBSTANCE	HCC	MEAN BACK- GRD.	MO'LY AVE, LIMIT	1/5 OF EFFL. LIMIT	MEAN EFFL. CONC.
Arsenic	13.3		134.6	26.9	<1.0
Bis(2-ethylhexyl)					
phthalate***	6.9		70	14	11

Because only one substance for which Human Cancer Criteria exists was detected, determination of the cumulative cancer risk is not needed.

Conclusions and Recommendations: Based on a comparison of the effluent data and calculated effluent limitations, effluent limitations are apparently needed for mercury, chromium +6, and Bis(2-ethylhexyl) phthalate.

Mercury – The previous permit included a variance from the calculated WQBEL for Mercury of 3.3 ng/L as a daily maximum. A review of data from the September 2014 through February 2017 indicates the 30 day P₉₉ is 1.89 ng/L, which is above the Wildlife Criterion of 1.3 ng/L. Therefore, a mercury effluent limit is recommended for the Stoughton WWTF.

Section NR 106.145(4) allows for eligibility for an alternative mercury effluent limitation if the permittee submits an application for an alternative mercury limit, which includes the submittal of a pollutant minimization plan. Stoughton has submitted this application. Section NR 106.145(5) specifies that an alternative limitation shall equal the 1-day P₉₉ of the effluent data, and shall be expressed as a daily maximum concentration. The applicable alternative mercury limitation of 3.46 ng/L, as a daily maximum. However since the current permit has an alternative mercury limit which is more stringent, that limit remains applicable. Therefore if a variance is granted and approved by US Environmental Protection Agency a limit of 3.3 ng/L as a daily maximum is recommended.

<u>Chromium (+6)</u> – Since the one detected chromium (+6) sample is greater than $1/5^{th}$ of the calculated effluent, a **limit for chromium (+6)** is recommended. Due to the lack of additional samples, it is recommended a compliance schedule is given to allow time to collect more data to determine if this one sample is representative of the effluent. Monthly sampling during the first year of the permit term is recommended.

<u>Bis(2-ethylhexyl)</u> phthalate- Since the one detected Bis(2-ethylhexyl) phthalate samples is greater than $1/5^{th}$ of the calculated daily max and weekly average limits, **both daily max and weekly average limits** are recommended.

Bis(2-ethylhexyl) phthalate sample contamination has been identified by other dischargers, originating from the vinyl tubing used in the automatic sampler. If similar tubing was used for the collection of the sample included in this permit application, contamination is suspected and Stoughton representatives should be advised to investigate this possibility. If they can demonstrate such sample contamination, that the sample result of 11 μ g/L is not representative of the effluent discharged, prior to the end of the 30-day Public Notice period preceding permit reissuance, the need for effluent limitations for this substance will

be reviewed. The permit may be written with a compliance schedule to attain compliance with the effluent limitations for this substance.

<u>Chloride-</u> Consistent with the current permit, **four samples per month (on consecutive days) are recommended.** This allows for averaging of the results to compare with the final water quality based effluent limit, and also allows the use of the average in determining future interim limits, if needed.

PART 3 – WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR AMMONIA NITROGEN

Section NR 106.33(2) was updated effective September 1, 2016. As a result, seasonal 20 and 40 mg/L thresholds for including ammonia limits in municipal discharge permits are no longer applicable under current rules. As such, s. NR 106.33(1) enables the Department to determine the need to include ammonia limits in municipal discharge permits based on the statistical comparisons in s. NR 106.05.

Daily Maximum Limits based on Acute Toxicity Criteria (ATC):

Daily maximum limitations are based on acute toxicity criteria, which are a function of the effluent pH and the receiving water classification. The acute toxicity criterion (ATC) for ammonia is calculated using the following equation.

ATC in mg/L =
$$[A \div (1 + 10^{(7.204 - pH)})] + [B \div (1 + 10^{(pH - 7.204)})]$$

Where:
A = 0.411 and B = 58.4 for a Warmwater Sport fishery, and pH (s.u.) = that characteristic of the effluent.

The effluent pH data for the past six years was examined as part of this evaluation. A total of 1097 sample results were reported from January 2010 through March 2017. The maximum reported value was 7.8 s.u. (Standard pH Units), and a pH of greater than 7.7 s.u. was reported nine times. More than 99% of the time the pH was 7.7 s.u. or less. The 1-day P₉₉, calculated in accordance with s. NR 106.05(5), is 7.72 s.u. The mean plus the standard deviation multiplied by a factor of 2.33, an estimate of the upper ninety ninth percentile for a normally distributed dataset, is 7.72 s.u. A value of 7.7 s.u. is believed to represent the maximum reasonably expected pH, and therefore most appropriate for determining daily maximum limitations for ammonia nitrogen. Substituting a value of 7.7 s.u. into the equation above yields an ATC = 13.96 mg/L and a computed daily maximum limit of 27.91 mg/L.

Updates to subchapter IV of Ch. NR 106, Wis. Adm. Code (effective September 1, 2016) outline the option for the Department to implement use of the 1- Q_{10} receiving water low flow in order to calculate daily maximum ammonia nitrogen limits if it is determined that the previous method of acute ammonia limit calculation (2×ATC) is not sufficiently protective of the fish and aquatic life. Since the Qs:Qe ratio is greater than 2:1; the 2×ATC method will yield the most stringent limits. Therefore the limits based upon the 1- Q_{10} receiving water low flow will not be calculated.

Presented below is a table of daily maximum limitations corresponding to various effluent pH values. The current permit allows for use of the variable daily maximum ammonia limits so this table has been updated to reflect current discharge conditions. Use of this table is not necessarily recommended in the permit, but it is presented herein should the permittee wish to use this option.

Attachment #1

Daily Maximum Limits - WWSF

Effluent pH s.u.	NH ₃ -N Limit mg/L	Effluent pH s.u.	NH3-N Limit mg/L	Effluent pH s.u.	NH ₃ -N Limit mg/L
$6.0 < pH \le 6.1$	110	$7.0 < pH \le 7.1$	72	$8.0 < pH \le 8.1$	17
$6.1 \le pH \le 6.2$	108	$7.1 < pH \le 7.2$	66	$8.1 < pH \le 8.2$	14
$6.2 \le pH \le 6.3$	106	$7.2 < pH \le 7.3$	59	$8.2 \le pH \le 8.3$	11
$6.3 < pH \le 6.4$	104	$7.3 < pH \le 7.4$	52	$8.3 < pH \le 8.4$	9.4
$6.4 \le pH \le 6.5$	101	$7.4 < pH \le 7.5$	46	$8.4 < pH \le 8.5$	7.8
6.5 < pH ≤ 6.6	98	$7.5 < pH \le 7.6$	40	$8.5 < pH \le 8.6$	6.4
$6.6 < pH \le 6.7$	94	$7.6 < pH \le 7.7$	34	$8.6 \le pH \le 8.7$	5.3
$6.7 < pH \le 6.8$	89	$7.7 \le pH \le 7.8$	29	$8.7 \le pH \le 8.8$	4.4
$6.8 < pH \le 6.9$	84	$7.8 < pH \le 7.9$	24	$8.8 < pH \le 8.9$	3.7
$6.9 \le pH \le 7.0$	78	$7.9 < pH \le 8.0$	20	$8.9 < pH \le 9.0$	3.1

Weekly Average & Monthly Average Limits based on Chronic Toxicity Criteria (CTC):

The ammonia limit calculation also warrants evaluation of weekly and monthly average limits based on chronic toxicity criteria for ammonia, since those limits relate to the assimilative capacity of the receiving water.

Weekly average and monthly average limits for Ammonia Nitrogen are based on chronic toxicity criteria. The 30-day chronic toxicity criterion (CTC) for ammonia in waters classified as a Warmwater sport fishery is calculated by the following equation.

CTC = E x {
$$[0.0676 \div (1 + 10^{(7.688 - pH)})] + [2.912 \div (1 + 10^{(pH - 7.688)})]$$
} x C Where:

pH = the pH (su) of the receiving water,

E = 0.854,

C = the minimum of 2.85 or 1.45 x $10^{(0.028 \times (25-T))}$ – (Early Life Stages Present), or C = 1.45 x $10^{(0.028 \times (25-T))}$ – (Early Life Stages Absent), and

T = the temperature (°C) of the receiving water – (Early Life Stages Present), or

T = the maximum of the actual temperature (°C) and 7 - (Early Life Stages Absent)

The 4-day criterion is simply equal to the 30-day criterion multiplied by 2.5. The 4-day criteria are used in a mass-balance equation with the 7-Q₁₀ (4-Q₃, if available) to derive weekly average limitations. And the 30-day criteria are used with the 30-Q₅ (estimated as 85% of the 7-Q₂ if the 30-Q₅ is not available) to derive monthly average limitations. The stream flow value is further adjusted to temperature. 100% of the flow is used if the Temperature ≥ 16 °C. Only 25% of the flow is used if the Temperature < 11 °C. And 50% of the flow is used if the Temperature ≥ 11 °C but ≤ 16 °C.

The rules provide a mechanism for less stringent weekly average and monthly average effluent limitations when early life stages (ELS) of critical organisms are absent from the receiving water. This applies only when the water temperature is less than 14.5 °C, during the winter and spring months. Burbot, an early spawning species, are not believed to be present in the Yahara River, based on conversations with local

fisheries biologists. So "ELS Absent" criteria apply from October through March, and "ELS Present" criteria will apply from April through September.

Since minimal ambient data is available, the "default" basin assumed values are used for Temperature, pH and background ammonia concentrations, shown in the table below, with the resulting criteria and effluent limitations.

		Spring April-May	Summer June-Sept	Winter Oct-Mar
	7-Q ₁₀ (cfs)	21	21	21
	7-Q ₂ (cfs)	41	41	41
	Ammonia (mg/L)	0.09	0.07	0.135
Background	Temperature (°C)	6	19	4
Information:	pH (s.u.)	7.95	7.95	7.95
	% of Flow used	25	100	25
	Reference Weekly Flow (cfs)	5.25	21	5.25
	Reference Monthly Flow (cfs)	8.71	34.85	8.71
	4-day Chronic			
	Early Life Stages Present	6.53	5.02	
Criteria	Early Life Stages Absent			10.61
mg/L:	30-day Chronic			
	Early Life Stages Present	2.61	2.01	
	Early Life Stages Absent			4.24
	Weekly Average			
Effluent	Early Life Stages Present	19.78	45.71	
Limitations	Early Life Stages Absent			32.14
mg/L:	Monthly Average			
	Early Life Stages Present	11.22	28.44	
	Early Life Stages Absent			18.26

Reasonable Potential:

The following table evaluates the statistics based upon ammonia data reported from January 2010 through March 2017 with those results being compared to the calculated limits to determine the need to include ammonia limits in the permit for the months and averaging periods where there currently isn't a limit. That need is determined by calculating 99th upper percentile (or 1-day, 4-day, and 30 day P₉₉'s) values for ammonia during each of the three periods of months and comparing to the daily maximum, weekly average, and monthly average limits, respectively.

	Ammonia mg/L April - May	Ammonia mg/L June - September	Ammonia mg/L October - March
1-day P ₉₉	32.70	35.75	37.63
4-day P ₉₉	20.64	19.68	22.62
30-day P ₉₉	14.53	11.21	15.02
Mean*	11.67	7.62	11.58
Std	6.16	7.24	7.30
Sample size	181	366	584
Range	1.7-33.60	0.09-35.80	<0.022-39.0

Conclusions and Recommendations:

In summary, after rounding to two significant figures, the following effluent limitations for Ammonia Nitrogen are recommended for Stoughton. No mass limitations are recommended in accordance with s. NR 106.32(5). Additional limitations are discussed in Part 6.

Months Applicable	April-May	June-Sept	Oct-Mar
Daily Maximum	28	28	28
Weekly Average	20	-	-
Monthly Average	11	-	_

PART 4 – PHOSPHORUS

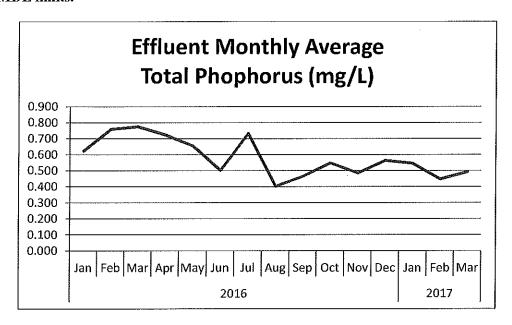
Section NR 217.16, Wis. Adm. Code states that the Department my include a TMDL-derived water quality based effluent (WQBEL) for phosphorus in addition to, or in lieu of, a s. NR 217.13, Wis. Adm. Code WQBEL in a WPDES permit. The Rock River TMDL was developed to protect the water quality of impaired waters within the watershed and the discharge from the Stoughton WWTF is to the Yahara River. Since the Yahara River was listed as impaired prior to TMDL development the TMDL-based phosphorus limits were included in the permit at the last reissuance rather than the s. NR 217.13, Wis. Adm. Code WQBEL. Stoughton was unable to meet these limits, and a compliance schedule and an interim limit of 1.3 mg/L were required in the permit.

The Yahara River remains impaired for phosphorus; meaning the Rock River TMDL limits remain applicable. The following limits from the current permit are recommended to be retained for phosphorus:

Total Phosphorus Effluent Limitations				
Month	Monthly Ave ² (lbs/day)			
Jan	4.3			
Feb	5.6			
March	4.9			
April	5.3			
May	5.2			
June	5.3			
July	5.1			
Aug	4.6			
Sept	4.9			
Oct	4.1			
Nov	4.0			
Dec	3.9			

As part of the compliance schedule, Stoughton has notified the Department of its intent to use adaptive management to comply with the limits. In accordance with s. NR 217.18 (3) (e) 2, Wis. Adm. Code, the effluent concentration limits shall be 0.6 mg/L expressed as a six-month average and 1.0 mg/L as a

monthly average in the first permit of an adaptive management plan. If the permittee is unable to meet this value, a compliance schedule and an interim limit of 1.0 mg/L may be included in the reissued permit. Based upon available data from the previous 12 months, it appears that Stoughton can comply with the 0.6 mg/L interim limit upon permit issuance. Therefore, both concentration limits of 0.6 mg/L as a six-month average and 1.0mg/l as a monthly average are recommended in addition to the Rock River TMDL limits.



Six-Month Concent (mg/	ration
May-Oct	0.551
Nov-Apr	0.543

Monthly . Concent (mg/	ration
Apr-16	0.724
May-16	0.655
Jun-16	0.502
Jul-16	0.733
Aug-16	0.403
Sep-16	0.465
Oct-16	0.548
Nov-16	0.485
Dec-16	0.563
Jan-17	0.545
Feb-17	0.448
Mar-17	0.492

Page 12 of 20 Stoughton Wastewater Treatment Facility

PART 5-THERMAL

New surface water quality standards for temperature took effect on October 1, 2010. These new regulations are detailed in chs. NR 102 (Subchapter II – Water Quality Standards for Temperature) and NR 106 (Subchapter V – Effluent Limitations for Temperature) of the Wisconsin Administrative Code. Daily maximum and weekly average temperature criteria are available for the 12 different months of the year depending on the receiving water classification.

In accordance with s. NR 106.53(2)(b), the highest daily maximum flow rate for a calendar month is used to determine the acute (daily maximum) effluent limitation. In accordance with s. NR 106.53(2)(c), the highest 7-day rolling average flow rate for a calendar month is used to determine the sub-lethal (weekly average) effluent limitation. These values were based off of actual flow reported from January 2010-March 2017.

The table below summarizes the maximum temperatures reported during monitoring in 2012. Comparing the representative highest effluent temperature to the calculated effluent limits determines the reasonable potential of exceeding the effluent limits. The complete thermal table used for calculation is attached.

	Representative Highest Monthly Effluent Temperature		13 Mr. California de la compansión de la c	d Effluent nit
Month	Weekly Maximum (°F)	Daily Maximum (°F)	Effluent	Daily Maximum Effluent Limitation (°F)
JAN	44	46		120
FEB	46	52	-	120
MAR	57	57	-	120
APR	58	59	88	120
MAY	63	65	105	120
ЛUN	70	70	100	115
JUL	74	74	103	100
AUG	74	74	-	120
SEP	73	73	-	120
OCT	67 ·	68	117	120
NOV	61	62	-	120
DEC	59	60	-	120

Reasonable Potential:

Based on the available effluent data, no effluent limits are recommended for temperature. One year of temperature monitoring is recommended during the fourth year of the next permit term.

Attachment #1 PART 6- EXPRESSION OF LIMITS

Revisions to ch. NR 106 align Wisconsin's water quality-based effluent limitations with 40 CFR 122.45(d), which requires WPDES permits contain the following limits, whenever practicable and necessary to protect water quality:

- Weekly average and monthly average limitations for publically owned treatment works (POTWs), and
- Daily maximum and monthly average limitations for all other discharges.

Stoughton is a POTW, and is therefore subject to weekly average and monthly average limitations whenever limitations are determined to be necessary.

This evaluation provides additional limitations necessary to comply with the expression of limits in s. NR 106.07. Pollutants already compliant with s. NR 106.07 or that have an approved impracticability demonstration, are excluded from this evaluation including water-quality based effluent limitations for phosphorus, temperature, and pH, among other parameters.

Additional limitations needed to comply with s. NR 106.07 Expression of limits:

Parameter	Daily Maximum	Weekly Average	Monthly Average	Weekly Geometric Mean	Monthly Geometric Mean	Multiplication Factor (CV)	Assumed Monitoring Frequency (n)
Fecal Coliforms				780 #/100mL ₃	400 #/100ml	1.95	8
Ammonia Nitrogen April-May June-Sept Oct-March	28 mg/L 28 mg/L 28 mg/L	20 mg/L 28 mg/L ₁ 28 mg/L ₁	11 mg/L 28 mg/L ₁ 18 mg/L ₁				
Chromium (+6)	32.04 μg/L	32.04 μg/L ₁	32.04 μg/L ₁				
Bis(2-ethylhexyl) phthalate	33.92 μg/L	13.33 μg/L	13.33 μg/L ₂				

Methods for calculation:

The methods for calculating limitations for municipal POTWs to conform to 40 CFR 122.45(d) are specified in s. NR 106.07(3), and are as follows:

- 1. Whenever a daily maximum limitation is determined necessary to protect water quality, a weekly and monthly average limitation shall also be included in the permit and set equal to the daily maximum limit or the calculated weekly average and monthly average water quality based effluent limitations, whichever is more restrictive.
- Whenever a weekly average limitation is determined necessary to protect water quality, a
 monthly average limitation shall also be included in the permit and set equal to the weekly
 average limit unless a more restrictive limit is already determined necessary to protect water
 quality.
- 3. Whenever a monthly average limitation is determined necessary to protect water quality, a weekly average limit shall be calculated using the following procedure and included in the permit unless a more restrictive limit is already determined necessary to protect water quality:

Weekly Average Limitation = (Monthly Average Limitation x MF)

Where:

MF= Multiplication factor as defined in Table 1

CV = Standard deviation/arithmetic mean,

= 0.6 for < 10 data points and for fecal coliform

n= the number of samples per month required in the permit

s. NR 106.07 (3) (e) 4. Table 1 — Multiplication Factor (for CV = 0.6)

	<u> </u>	· · · · · · · · · · · · · · · · · · ·		1	<u> </u>					
CV	n=1	n=2	n=3	n=4	n=8	n=12	n=16	n=20	n=24	n=30
0.6	1.00	1.31	1.51	1.64	1.95	2.12	2.23	2.30	2.36	2.43

Note: This methodology is based on the *Technical Support Document for Water Quality-based Toxics Control* (March 1991). PB91-127415.

PART 7 – WHOLE EFFLUENT TOXICITY (WET)

WET testing is used to measure, predict, and control the discharge of toxic materials that may be harmful to aquatic life. In WET tests, organisms are exposed to a series of effluent concentrations for a given time and effects are recorded. The following evaluation is based on procedures in the Department's WET Program Guidance Document (revision #11, dated November 1, 2016).

- Acute tests predict the concentration that causes lethality of aquatic organisms during a 48 to 96-hour exposure. In order to assure that a discharge is not acutely toxic to organisms in the receiving water, WET tests must produce a statistically valid LC₅₀ (Lethal Concentration to 50% of the test organisms) greater than 100% effluent.
- Chronic tests predict the concentration that interferes with the growth or reproduction of test organisms during a seven-day exposure. In order to assure that a discharge is not chronically toxic to organisms in the receiving water, WET tests must produce a statistically valid IC₂₅ (Inhibition Concentration) greater than the instream waste concentration (IWC). The IWC is an estimate of the proportion of effluent to total volume of water (receiving water + effluent). The IWC of 33% shown in the WET Checklist summary below was calculated according to the following equation, as specified in s. NR 106.03(6):

IWC (as %) =
$$Q_e \div \{(1 - f)Q_e + Q_s\} \times 100$$

Where:

 $Q_e = \text{annual average flow} = 2.56 \text{ cfs}$

 $f = fraction of the Q_e$ withdrawn from the receiving water = 0

 $Q_s = \frac{1}{4}$ of the 7- $Q_{10} = 21$ cfs ÷ 4 = 5.25 cfs

- According to the State of Wisconsin Aquatic Life Toxicity Testing Methods Manual (s. NR 219.04, Table A, Wis. Adm. Code), a synthetic (standard) laboratory water may be used as the dilution water and primary control in acute WET tests, unless the use of different dilution water is approved by the Department prior to use. The primary control water must be specified in the WPDES permit.
- According to the State of Wisconsin Aquatic Life Toxicity Testing Methods Manual (s. NR 219.04,
 Table A, Wis. Adm. Code), receiving water must be used as the dilution water and primary control in
 chronic WET tests, unless the use of different dilution water is approved by the Department prior to use.
 The dilution water used in WET tests conducted on Outfall 001 shall be a grab sample collected from
 the Yahara River. The specific receiving water location must be specified in the WPDES permit.

• Shown below is a tabulation of all available WET data for Outfall 001. Efforts are made to insure that decisions about WET monitoring and limits are made based on representative data. Data which is not believed to be representative of the discharge is not included in reasonable potential calculations. The table below differentiates between tests used and not used when making WET determinations.

WET Data History

Date	LC ₅₀ %	Acute l % surviva	Results I in 100%	effluent)			Results 5 %		Footnotes
Test Initiated	C. dubia	Fathead minnow	Pass or Fail?	Used in RP?	C. dubia	Fathead Minnow	Pass or Fail?	Use in RP?	or Comments
11/11/2014	>100	>100	Pass	Yes	94.1	>100	Pass	Yes	
02/24/2015	>100	>100	Pass	Yes	72.6	82.7	Pass	Yes	
06/07/2016	>100	81	Fail	Yes	35.7	32.3	Fail	Yes	
08/02/2016	>100	>100	Pass	Yes	>100	>100	Pass	Yes	Retest
08/30/2016	>100	>100	Pass	Yes	77.5	>100	Pass	Yes	Retest

Footnotes:

• WET reasonable potential is determined by multiplying the highest toxicity value that has been measured in the effluent by a safety factor, in order to predict the likelihood (95% probability) of toxicity occurring in the effluent above the applicable WET limit. The safety factor used in the equation changes based on the number of toxicity detects in the dataset. The fewer detects present, the higher the safety factor, because there is more uncertainty surrounding the predicted value. WET limits must be given, according to s. NR 106.08(6), Wis. Adm. Code, whenever the applicable Reasonable Potential equation results in a value greater than 1.0.

According to s. NR 106.08(6) (d), TUa effluent values are equal to zero whenever toxicity is not detected (i.e. when the LC50. IC25 or IC $50 \ge 100$ %)

Acute Reasonable Potential = [(TUa effluent) (B)]

]	TUa (maximum)	D
		D Completely and the Complete ND
	100/LC50	(multiplication factor from s. NR
ı		106.08(5)(c), Wis. Adm. Code, Table 4)
	100/81	6.2
		Based on 1 detects

[(TUa effluent) (B)] = 7.65 > 1.0

Chronic Reasonable Potential = [(TUa effluent) (B) (TWC)]

	7 73	
TUa (maximum) 100/IC25	B (multiplication factor from s. NR	WC
100/1025	106.08(5)(c), Wis. Adm. Code, Table 4)	
100/32.3	2.3	33%
	Based on 4 detects	,

[(TUa effluent) (B) (IWC)] = 2.35 > 1.0

Page 16 of 20 Stoughton Wastewater Treatment Facility

Therefore, reasonable potential is shown for acute and chronic WET using the procedures in s. NR 106.08(6) and representative data from November 2014-August 2016.

Expression of WET limits

Acute WET limit = 1.0 TU_a (daily maximum)

Chronic WET limit = 3.0 TU_c (monthly average)

The WET Checklist was developed to help DNR staff make recommendations regarding WET limits, monitoring, and other permit conditions. The Checklist steps the user through a series of questions that evaluate the potential for effluent toxicity. The Checklist indicates whether acute and chronic WET limits are needed, based on requirements specified in s. NR 106.08, Wis. Adm. Code, and recommends monitoring frequencies based on points accumulated during the Checklist analysis. As toxicity potential increases, more points accumulate and more monitoring is recommended to insure that toxicity is not occurring. The completed WET Checklist recommendations for this permittee are summarized in the table below. Staff recommendations, based on the WET Checklist and best professional judgment, are provided below the summary table. For guidance related to RP and the WET Checklist, see Chapter 1.3 of the WET Guidance Document: http://dnr.wi.gov/topic/wastewater/WETguidance.html.

WET Checklist Summary

	Acute	Chronic
AMZ/IWC	Not Applicable. 0 Points	IWC = 33 %. 0 Points
Historical Data	5 tests used to calculate RP = 7.65. 1 test failed	5 tests used to calculate RP = 2.66 1 test failed
Effluent Variability	Little variability, no violations or upsets, consistent WWTF operations 0 Points	Same as Acute. 0 Points
Receiving Water Classification	Full Fish & Aquatic Life 5 Points	Same as Acute. 5 Points
	Limits for 2substances based on ATC: Bis(2-Ethylhexyl) phthalate and Chromium (+6)	Limits for 2 substances based on CTC; Bis(2-Ethylhexyl) phthalate and Chromium (+6)
Chemical-Specific Data	Additional detects: Antimony, Chromium (+3), Copper, Lead, Mercury, Nickel, Zinc, Cyanide, and Chloride	Additional detects: Antimony, Chromium (+3), Copper, Lead, Mercury, Nickel, Zinc, Cyanide, and Chloride
	11 Points	11 Points
Additives	0 Biocides and 0 Water Quality Conditioners added. SorbX-100 Used: No 0 Points	No additives are present. O Points

	Attachment #1	
Discharge 3 Industrial Contributors: B&G Foods Inc., Color-Con, Uniroyal Global Engineering Products, LLC 7 Points		Same as Acute. 7 Points
Wastewater Treatment	Secondary or Better 0 Points	Same as Acute. 0 Points
Downstream Impacts	No impacts known 0 Points	Same as Acute. 0 Points
Total Checklist Points:	23 Points	23 Points
Recommended- Monitoring Frequency (from Checklist):	1x yearly	Ix yearly
Limit Required?	Yes Limit = 1:0 TU _a	Yes Limit = 3.0TÜ ₆
TRE Recommended? (from Checklist)	No	No

- A minimum of annual acute and chronic monitoring is required because acute and chronic WET limits are required. Federal regulations at 40 CFR Part 122.44(i) require that monitoring occur at least once per year when a limit is present.
- A minimum of annual acute and chronic monitoring is recommended because Stoughton is a major municipal discharger with a design flow in excess of 1.0 MGD. Federal regulations at 40 CFR Part 122.21(j) requires at least 4 acute and chronic WET tests with each permit application on samples collected since the previous reissuance. Therefore, annual monitoring is recommended in the permit term, so that data will be available for the next permit application.

Conclusions and Recommendations:

Following the guidance provided in the Department's WET Program Guidance Document (revision #11, dated November 1, 2016), based upon the point totals generated by the WET Checklist, other information given above, and Chapter 1.3 of the WET Guidance Document, annual acute WET testing is recommended and annual chronic WET testing is recommended in the reissued permit. Tests should be done in rotating quarters, in order to collect seasonal information about this discharge. WET testing shall continue after the permit expiration date (until the permit is reissued).

According to the requirements specified in s. NR 106.08, Wis. Adm. Code, acute and chronic WET limits are required. The acute WET limit should be expressed as 1.0 TUa as a daily maximum in the effluent limits table of the permit. The chronic WET limit should be expressed as 3.0 TUc as a monthly average in the effluent limits table of the permit.

Attachment #2

Temperature limits for receiving waters with unidirectional flow

Limit Daily Effluent Limits Calculated Weekly Limit Ave 105 100 103 117 \mathbb{F} Small warm water sport or forage fish community of Representative Daily Max* 99th Percentile 9 9 *L*9 72 75 75 75 Weekly Ave (°F) 69 72 72 72 4 Highest Monthly Daily Max Representative Temperature 57 59 65 70 74 74 73 68 cfs (calculation using default ambient temperature data) 2.1 YES 25% 7 Weekly Ave 46 58 63 74 74 73 67 $7-Q_{10}$ Dilution: Stream type: Calculation Needed? Qs:Qe ratio: Daily Max Flow Rate Effluent Flow Rate (Qe) (MGD) Representative Highest (Qea) 1.543 1.460 1.798 1.890 2.540 1.419 1.506 1.727 4.135 1.445 Data Range Rolling Ave 01/01/10 03/31/17 (MGD) (Qesl) .148 .588 2.138 .252 .584 .542 1.837 1.353 1.243 331 End: Receiving Start: $(7-Q_{10})$ Water Flow Rate (cfs) 46 54 27 24 33 Acute WQC MGD (F) 76 77 79 82 84 85 84 82 80 77 77 Water Quality Criteria 22-Apr-17 Stoughton 1.65 SER Lethal WQC 50 52 55 65 9/ 81 81 001 Facility: (Ge); Outfall(s): Date Prepared: Design Flow Region: (default) 48 99 69 2 9 58 Month MAR MAY AUG SEPOCT APR JEL JEL

Max

(°F) 120 120 120 120 120 115

120 120

120 120

64

1.577 1.347

.228

100

NOV

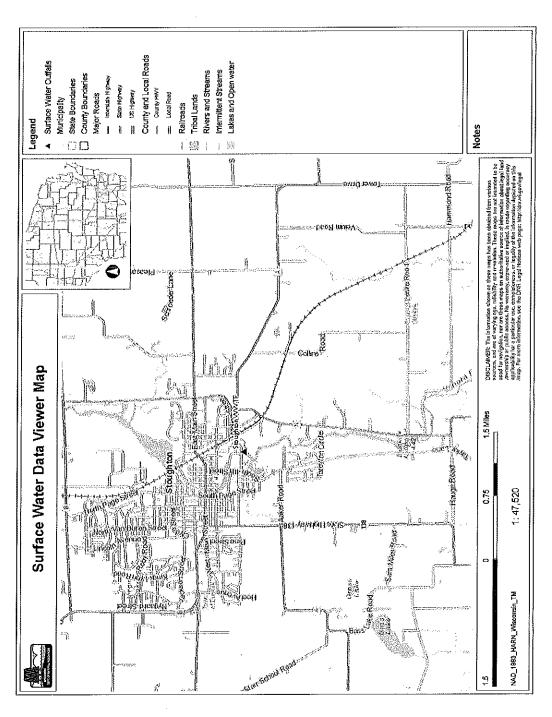
DEC

1.175

maximum.

*NA - Indicates that there are greater than 100 daily maximum values, therefore 99th percentile would be a value less than the recorded daily Page 19 of 20

Stoughton Wastewater Treatment Facility



Page 20 of 20 Stoughton Wastewater Treatment Facility

State of Wisconsin Department of Natural Resources Bureau of Watershed Management PO Box 7921, Madison Wi 53707-7921 dnr.wl.gov

Watershed Adaptive Management Request

Form 3200-139 (1/12)

Page 1 of 3

Notice: Pursuant to s. NR 217.18, Wis. Adm. Code, this form must be completed and submitted to the Department at the time of the reissuance of an existing WPDES (Wisconsin pollutant discharge elimination system) permit to request adaptive management for phosphorus water quality based effluent limits (WQBEL). Failure to provide all requested information may result in denial of your request. Personal information collected will be used for administrative purposes and may be provided to requestors to the extent required by Wisconsin Open Records law [ss. 19.31-19.39, Wis. Stats.].

Typ <u>e of</u> Request:										
This is the f	ormal adaptive ma	anage	men	t request as requ	uired in	n s. N	IR 217.	18(2)		
	eliminary adaptive								y planning.)	
Facility and Permit Infor	mation ****			i fice de la companio		X= 2				
Facility Name							DES Perm		<u> </u>	
Stoughton Utilities Waste	ewater Treatme	nt P	lant			WI	-0020			
Facility Address				City Stoughton			N N	tate //	ZIP Code 53589	
700 Mandt Parkway Receiving Water				Stoughton			14,	<u>'' </u>	00009	
Yahara River										
Owner Contact Informat	ion	P - (1)					11000144	4 2 2 4		
Last Name	First Na				MI	ł	ne No. (în		code)	
Kardasz	Robe	rt			Р		8-877- Number	7423		
Street Address 600 South Fourth Street							. Number 3-873-4	1878		
City		State	1	ZIP Code	Email	L				
Stoughton		WI		53589	rkar	dasz	@stou	ightor	nutilities.com	
Facility Information						e de la companya de l				
Provide listed information for ea							1 .		- 1 4	
Required for AM Request	Wis. Administrati Code Reference			Conclusion			-		e/Source of attach as neede	d)
1. NPS contribute at least 50% of total P contribution	s. NR 217.18(2)(b))	1	IPS contributes at	least 5	0%			asin TMDL	
30% of total P contribution	* 1 (00)			IPS DOES NOT co	ontribut	te at	Report			
2. WQBEL Requires Filtration	s. NR 217.18(2)(c)		F	iltration required			See Atta	,_,		
	Filtration NOT required (limits < 0.4 mg/L)									
3, AM Plan	s. NR 217.18(2)(d)) [٩	lan is Included – F	Page 3				o the Yahara	
				Plan is NOT include For a <i>preliminary</i> ac			WINS A Stough		n, of which	
		-		ror a premontreque nanagementreque			Stough	IOH IS (a part.	
				lan not required			analyin			
Facility Operation and F				TABLE OF THE STATE	VEC 2-			- A 67 LL -	A phoophogus (O)	
Current P removal capab provide a summary of the l										

Current P removal capability – If the facility is currently required by a WPDES permit to monitor effluent phosphorus (P) provide a summary of the influent and effluent annual average P concentrations for each of the past three (3) years. If permit required P data is not available, the applicant should provide any other P data that may be applicable and available. If no date is available, the Department may estimate the P effluent concentration by based on data from other similar facilities.

	Average TP, mg/L					
Year	Influent	Effluent				
2012	6.0	0.56				
2013	6.5	0.59				
2014	5.6	0.51				

Watershed Adaptive Management Request Form 3200-139 (1/12) Page 2 of 3

3. Previous Studies - Reference or attach any facility planning or evaluation study that evaluated facility performance capabilities (Note - Only include studies that are recent, within 5 years, or otherwise applicable for the evaluation of the existing facility and current conditions). See Attachment C. **Adaptive Management Plan (SEVER 17/18(ii))** This section should summarize the Adaptive Management Plan for internal and external review. A complete Adaptive Management Plan should be attached. Note: If this is a preliminary adaptive management request, this section is not required. **Watershed Plan should be attached. Note: If this is a preliminary adaptive management request, this section is not required. **Watershed Yahara River **Wetershed Characteristics and Timeline Justification ** *Key Proposed Actions ** Key Goals and Measures for Determining Effectiveness *See Madison MSD's Yahara WiNs Adaptive Management Plan submitted under separate covand incorporated herein by reference.	Facility Operation – Provide a summary des describe storage procedures and the time pe	scription of overall facility operation. If not a continuously discharging facility, miods when effluent discharge occurs.
capabilities (Note – Only include studies that are recent, within 5 years, or otherwise applicable for the evaluation of the existing facility and current conditions). See Attachment C. Actaptive Management Plan (st.NR-217-18(d)). This section should summarize the Adaptive Management Plan for internal and external review. A complete Adaptive Management Plan should be attached. Note: If this is a preliminary adaptive management request, this section is not required. Watershed Yahara River Action Area (include map) * Watershed Characteristics and Timeline Justification * Key Proposed Actions * Key Goals and Measures for Determining Effectiveness *See Madison MSD's Yahara WINs Adaptive Management Plan submitted under separate cov	See Attachment B.	
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capabilities (Note - Only include studies that are recent, within 5 years, or otherwise applicable for the evaluation of the existing facility and current conditions). See Attachment C. Adaptive Management Plan (SENR-21/18(d)) This section should summarize the Adaptive Management Plan for internal and external review. A complete Adaptive Management Plan should be attached. Note: If this is a preiliminary adaptive management request, this section is not required. Watershed Yahara River Action Area (Include map) Watershed Characteristics and Timeline Justification Key Proposed Actions Key Goals and Measures for Determining Effectiveness See Madison MSD's Yahara WINs Adaptive Management Plan submitted under separate cov		
Adaptive Management Plan (Si NR-217-18(d)). This section should summarize the Adaptive Management Plan for internal and external review. A complete Adaptive Management Plan should be attached. Note: If this is a preliminary adaptive management request, this section is not required. Watershed Yahara River Action Area (Include map) Watershed Characteristics and Timeline Justification Key Proposed Actions Key Goals and Measures for Determining Effectiveness See Madison MSD's Yahara WINs Adaptive Management Plan submitted under separate cov	capabilities (Note - Only include studies that	facility planning or evaluation study that evaluated facility performance are recent, within 5 years, or otherwise applicable for the evaluation of the
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See Madison MSD's Yahara WINs Adaptive Management Plan submitted under separate cov		
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Partner(s)		
	Madison MSD and other Yahara WIN	s partners

Watershed Adaptive Management Request

Form 3200-139 (1/12).

Page 3 of 3

Funding Sources

Yahara WINs and its funding partners

Adaptive Management Request and Gertification:

Based on the information provided, I am requesting the Watershed Adaptive Management option to achieve compliance with phosphorus water quality standards in accordance with s. NR 217.19, Wis. Adm. Code. I certify that the information provided with this request is true, accurate and complete to the best of my knowledge.

Print or type name of person submitting request*	Title
Robert P. Kardasz	Utilities Director
Signature of Official	Date Signed
Rult P. Karlony	JUNE 15, 2016
*Must be an Authorized Regresofilative for the treatment facility	



910 West Wingra Drive Madison, WI 53715 (P) 608-251-4843 (F) 608-251-8655

June 7, 2017

Ms. Amy Garbe Wisconsin Department of Natural Resources 141 Northwest Barstow Street, Room 108 Waukesha, WI 53188

Re: WPDES Permit Number 0020338-09-0 Mercury Pollutant Minimization Program (PMP) Plan

Dear Ms. Garbe:

1. Background

This PMP has been developed to reduce the level of mercury discharged from the Stoughton Wastewater Treatment Plant (WWTP) to a level closer to or below the proposed water quality based effluent limit of 1.3 nanograms per liter (ng/L). Achieving this level is unlikely without the construction of new treatment systems. Stoughton Utilities (SU) has applied for a variance from the 1.3 ng/L mercury limit for the next term of the facility's Wisconsin Pollutant Discharge Elimination System (WPDES) permit. The PMP is a requirement of the variance.

SU developed a PMP in 2009 as a requirement of the Stoughton WWTP WPDES permit. The variance limit for mercury in the permit dated August 1, 2014, is 3.3 ng/L. Annual reports have been submitted to the Wisconsin Department of Natural Resources (WDNR) to show progress in the minimization program. Forms used to submit annual reports are included in Attachment A.

The WDNR is currently in the process of revoking and reissuing the WPDES permit for the Stoughton WWTP to incorporate the selected phosphorus compliance option. Total recoverable mercury data collected since 2012 indicates a statistical 1-day p99 of 3.86 ng/L. Since the 2014 permit will not remain in effect for the full five years, we believe continuing the variance mercury limit of 3.3 ng/L would be reasonable.

2. Influent and Effluent Mercury Concentrations in Wastewater

According to the United States Environmental Protection Agency (USEPA), the typical influent mercury concentrations at publically owned treatment works are in the 50 to 200 ng/L range. The Stoughton WWTP typically experiences concentrations near the lower end of this window. Since 2010, the highest influent mercury concentration was 950 ng/L in December 2010. This is over twice the concentration of the second highest measured concentration of 450 ng/L in June 2011, and appears to be an outlier. There were six influent samples with a mercury concentration above 100 ng/L; one sample from each of the six years of data were above this value. These annual spikes in concentration have a significant effect on the average mercury concentrations. The average and median concentrations in the wastewater from the City of Stoughton (City) were 113 ng/L and 51 ng/L, respectively.

The highest effluent mercury value since 2010 was 3.5 ng/L in March 2013. The average effluent mercury concentration since 2010 was 1.7 and the median concentration was 1.6. These effluent mercury levels are consistently low, however are typically higher than the water quality based effluent limit of 1.3 ng/L. There were eight samples since 2010 where the effluent mercury level was below the 1.3 ng/L limit. Of those eight samples, only two were below 1.0 ng/L.

Table B-1 includes influent and effluent mercury concentrations from quarterly samples along with the corresponding daily flow measurement and is located in Attachment B. Figure B-1 plots both influent

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Ms. Amy Garbe Wisconsin Department of Natural Resources Page 2 June 7, 2017

mercury concentration and daily flow relative to time. It should be noted that there was not any available flow data for the sample collected in December 2011, so an average daily flow of 1.21 million gallons per day (mgd) was used for plotting purposes. This data does not show a strong correlation between mercury and daily flow. The previous PMP appears to have had some benefit, as the annual spike observed in concentration has been lowered after 2011. These high values early in data collection contribute to a noticeable downward trending "best fit" line. This is more noticeable in the annual average influent mercury concentration graph, Figure B-2. The annual average suggests that the initial efforts of the PMP lowered a significant amount of influent mercury concentration. After the initial effect of the effort, the downward trend is less significant.

The effluent data has been more stable throughout the duration of data collection, with values typically consistent between 1 ng/L and 3 ng/L. Figure B-3 shows the effluent mercury concentration relative to daily flow measurement. The downward trend in the effluent data is so small that a trend is not determined to be significant. The slight downward trend may be attributed to the reduction of legacy mercury within the sewers. The insignificant decrease in effluent concentrations suggests that new treatment systems may be the only timely way to experience a significant reduction. This would be an overwhelming financial responsibility for the City. Legacy mercury in sewers will continue to decrease; however, at a slow rate.

Mercury concentrations in the biosolids (sludge) produced at the WWTP are analyzed once per year. The results from samples dating back to 2004 are shown in Table B-2 and Figure B-4. Since the development of the PMP in 2009, an obvious drop in biosolids metal quality has been observed. Since 2012, there have been two years where the sludge concentration was less than the limit of detection. These are shown as half of the limit of detection, or 0.7 milligrams per kilogram (mg/kg) in Figure B-4. The USEPA and WDNR criteria for mercury concentration in biosolids include a "ceiling" concentration of 57 mg/kg and an "exceptional quality" concentration of 17 mg/kg. The biosolids samples analyzed from the Stoughton WWTP have a maximum concentration of 5.3 mg/kg in April 2006. After 2011, the typical concentration is near 1 mg/kg; significantly lower than the "exceptional quality" standard. These low concentrations of mercury in the biosolids are further evidence of lower levels of mercury in the influent wastewater.

3. Identification of Sources of Mercury

As described above and as shown in the attached figures, the concentrations of mercury in the wastewater contributed to the Stoughton WWTP are typically very low.

There are currently five medical facilities identified in the wastewater service area: Stoughton Hospital, Dean Clinic, UW Health, Stoughton Vet, and Meriter Clinic. The medical facilities have been contacted by SU regarding best management practice (BMP) programs for disposal of mercury wastes. All facilities have implemented all recommended wastewater BMPs. The City plans to update BMP forms in 2017, and schedule site visits or an inspection every year to identify compliance with the updated BMPs.

There are currently four dental facilities identified in the wastewater service area: Lifetime Family Dentistry, John Wiencek, Adriana Jarmillo, and Thor Anderson. The four dental clinics have been inspected by SU annually. All dentists have been documented using amalgam separators. Annual follow-up will include documentation of separator maintenance. An annual letter is also planned to facilitate awareness and upkeep of BMPs.

There are two upper level school facilities in the wastewater service area: Stoughton High School and River Bluff Middle School. These schools are potential sources of mercury from chemistry laboratories or from the nurse's office. The two schools have been contacted and inspected by SU regarding disposal of mercury wastes and implementation of all recommended BMPs. An inspection is planned for each of the schools every other year to assure continued compliance with all recommended BMPs.

Ms. Amy Garbe Wisconsin Department of Natural Resources Page 3 June 7, 2017

There are three elementary school facilities in the wastewater service area: Fox Prairie Elementary School, Kegonsa Elementary School, and Sandhill Elementary School. These schools may also be potential sources of mercury from the nurse's office. The elementary schools have not been contacted by SU regarding disposal of mercury wastes and implementation of all recommended BMPs. SU will begin an outreach program and inspection of the elementary schools in the second year of the reissued WPDES permit term.

There are four industries identified in the wastewater service area: Stoughton WWTP, Stoughton Trailers, Color-Con, and Uniroyal. BMP forms were sent by SU to all industries to have them go through the outreach forms to see if anything has changed. A blank outreach form is included in Attachment C. A site visit is planned to be scheduled every other year throughout the duration of the WPDES permit to assure continued compliance with recommended BMPs.

There are several senior citizen centers in the wastewater service area. The two largest centers are Skaalen Nursing and Rehabilitation Center and Nazareth Health and Rehabilitation Center. These communities may be potential sources of mercury from products used in the nurse's office. SU will begin an outreach program and inspection of the two largest senior citizen centers beginning the second year of the reissued WPDES permit term.

There may be a few other customers in the wastewater service area that are potential sources of mercury, including heating, ventilation, and air conditioning (HVAC) wholesalers, automotive repair shops, and metal scrap yards. A survey of customers as potential mercury sources is planned to be expanded, with a follow-up of implementation of BMPs to be scheduled annually. An example survey is included with this letter in Attachment C. These sources will be included in the ensuing annual PMP reports following the issuance of the reissued WPDES permit.

A sampling plan will be implemented the first year of this permit by SU to try to identify sewers that contribute to mercury at the plant. During the first year, SU will collect samples each quarter from the influent at the WWTP and at each of the three main interceptors coming into the plant. If one interceptor has a higher concentration compared to the other two, SU will go into the tributary areas of that interceptor the following year and collect samples from main trunk lines in attempt to further pinpoint the source of mercury contributing to the WWTP. This will help identify if one of the business parks, schools, industries, or other area mentioned above may be a key source of mercury. This approach may also identify a sewer that contains legacy mercury. SU will rehabilitate a sewer containing high amounts of legacy mercury by cured in place pipe (CIPP) lining prior to the expiration of the reissued WPDES permit.

It seems most likely that the occasional increase in mercury concentration is due to legacy mercury in the sewer system or improper disposal of mercury wastes such as fluorescent light bulbs. SU will continue outreach programs to facilitate awareness; and inform customers about the clean sweep disposal and recycling program.

4. Categories of Mercury Sources

The largest sources of mercury in municipal wastewater are expected to be from industrial processes and from dental facilities. There are only four industries and four dental facilities in the wastewater service area, all of which have implemented all recommended BMPs. Each of the dental facilities uses amalgam separators.

Another potential category of mercury source is laboratories at schools and medical facilities. As part of previous PMP efforts, all schools and medical facilities indicated programs are in place for proper disposal of mercury wastes.

Ms. Amy Garbe Wisconsin Department of Natural Resources Page 4 June 7, 2017

Other commercial customers in the wastewater service area contributing mercury may include HVAC wholesalers, automotive repair shops, and metal scrap yards. Other contributors may be identified as a potential mercury source following a survey distributed to all commercial customers in the service area.

Another category of mercury sources is the improper disposal of mercury wastes. This category is only amenable to source control to the extent of public education and public access to facilities to dispose of mercury wastes in a proper manner.

SU plans to continue and expand upon the steps taken in previous PMPs as follows:

- a. Update the SU BMP forms for medical facilities. Visit all medical facilities in the wastewater service area regarding programs in place for disposal of mercury waste and spill management annually.
- b. Survey all dental facilities in the wastewater service area regarding disposal of mercury wastes and programs in place for disposal of mercury wastes every two years. The survey will include a request for documentation regarding maintenance performed on amalgam separators.
- c. Survey all schools in the wastewater service area regarding programs in place for disposal of mercury waste, spill management, and mercury elimination efforts every two years.
- d. Survey all industrial contributors regarding proper disposal of mercury waste and spill management every other year.
- e. Identify potential additional mercury contributors through a distributed survey to all commercial facilities in the wastewater service area.
- f. Survey newly identified mercury contributors for implementation of BMPs every other year.
- g. Monthly checks with Johns Disposal and weekly checks with Waste Management to facilitate identification of mercury contributors.
- h. Publish a Public Notice in the local newspaper, twice per year, regarding the hazards of mercury, proper disposal of products containing mercury, and spill management. The Public Notice will emphasize the types of products that may contain mercury and therefore require proper disposal. Examples of these products include fluorescent tubes and bulbs, button batteries from watches and hearing aids, chemistry sets, older thermometers and temperature switches, and older toys and games.
- i. Publicize county clean sweep events through the local newspaper. The clean sweep notice will emphasize the types of products that may contain mercury and therefore require proper disposal.

5. Documentation of Source Control and Outcomes

SU will continue to document the effectiveness of the PMP efforts with respect to mercury. Quarterly sampling and testing of influent and effluent wastewater will be continued. Graphs will be prepared annually to evaluate trends in influent and effluent mercury concentrations. Annual testing of mercury concentration in biosolids will also continue.

An annual PMP status report will also be prepared and submitted to the WDNR. The annual status report will include a list of the potential mercury sources, a summary of actions taken as part of the PMP, and the wastewater influent, effluent, and biosolids mercury monitoring results.

6. Maintenance of Effluent Quality for Mercury

Maintenance of effluent quality for mercury will be facilitated by:

a. Repeated contacts with customers that represent potential sources of mercury to confirm that BMPs have been implanted and remain in place.

Ms. Amy Garbe Wisconsin Department of Natural Resources Page 5 June 7, 2017

- b. Repeated public education through publication of newspaper notices and publicity of county clean sweep events.
- c. Continued operation of the WWTP to optimize treatment for conventional pollutants, which will help optimize mercury removal.

Please contact Jane Carlson or Ryan Yentz with any questions or comments regarding this PMP plan by phone at 608-251-4843 or by e-mail at Jane.Carlson@strand.com or Ryan.Yentz@strand.com.

Sincerely,

STRAND ASSOCIATES, INC.®

Jane Carlson, P.E., ENV SP

Senior Associate

Ryan M. Yentz

Enclosures

c/enc.: Brian G. Erickson, Stoughton Utilities Wastewater System Supervisor

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



FORM 1: Mercury PMP Report Cover Sheet

WPDES Permit Holder or Sewer	Authority Name: Stoughton Was	stewater Utility					
Initial Plan: X Annual Repor	rt and Date Initial Plan	Submitted					
Report Date: I	Period Covered by This Report:						
Name of Treatment Plant(s)	Name of Treatment Plant(s) WPDES Permit Number Mercury Effluent Limit (ng/l)						
Stoughton WWTP	WI-0020338-08-0	3.3					
Person to contact concerning info	ormation contained in this report:						
Name:	Brian Erickson						
Title:	Wastewater System Superviso	or					
Mailing Address:	600 S. Fourth St						
City, State, Zip Code:	Stoughton, WI 53589						
Telephone No.	608-877-7421						
E-mail:	berickson@stoughtonutilitie	es.com					
attachments. Based upon my		on submitted in this document and lately responsible for obtaining the is true, accurate and complete.					
	Wastewater System Su						
Date	Title	e of Official					
Brian Erickson Name of Official	Sign	nature of Official					

FORM 2: Mercury PMP Summary of Resources

1. Person(s) implementing PMP	Title
Brian Erickson	Wastewater System Supervisor
	
2. Total Person-Hours ¹	
Total Cost ²	
3. Are there any anticipated changes in treatment program hours or costs during the subsequent year purchasing equipment to implement the pollutant monitoring?	
Yes X No	If yes, explain:
county agencies, non-profit organizations, or oth reduction program?	is encouraged. Did any other municipal departments, er municipalities help implement part of your mercury
YesNo	If yes, explain:
5. A program for collecting mercury from the peravailable options for recycling mercury including events, and collection events hosted by the POTV	g household hazardous waste centers, clean sweep
Recycling Option	Frequency of Availability
Clean Sweep	Monthly
Waste Management	Weekly
Johns Disposal	Weekly

¹ Include time of all staff involved in administering and implementing the various program areas, e.g. Pretreatment Coordinator, Superintendent of POTW, Clerical Staff, Field Monitoring Personnel, Laboratory Personnel, and others.

² Include all administrative, monitoring, laboratory staff, and equipment costs including monitoring/analytical work done by an outside laboratory.

FORM 3: Mercury PMP Summary of Treatment Plant Analytical Mercury Data

Influent		Ef	fluent	Bio	solids	
	Concentration	Concentration			Concentration	
Date	ng/L	Date	ng/L	Date	mg/kg	
	No Data	4-17-08	2.9	7-29-09	2.1	
		5-1-08	1.9	3-13-09	1.4	
		5-14-08	1.7	5-07-08	3.4	
		5-29-08	42	9-17-08	2.9	
		6-25-08	1.4	10-04-07	4.0	
		7-8-08	1.1	4-11-07	2.2	
		7-12-08	1.9	10-04-06	2.9	
		7-21-08	1.1	4-17-06	5.3	
		8-25-08	1.6			
		9-16-08	0.8			
		10-16-08	1.4			
		11-5-08	1.5			
Average	N/D	Average	1.572	Average	3.025	
Test Method		Test Method	EPA1631E	Test Method	EPA 245.5	
Average from		Average from		Average from		
1 year ago		1 year ago		1 year ago		
Average from		Average from		Average from		
2 years ago		2 years ago		2 years ago		
Average from		Average from		Average from		
3 years ago		3 years ago		3 years ago		
Laboratory	doing the wastewate	er analysis:	Northern Lake Service, Inc			
Laborator	y doing the biosolids	analysis:		Test America		

Is there a numerical or narrative mercury limit in your sewer use ordinance	? <u>NO</u>	
If yes, what is it?		

FORM 4A: Medical Facility Inventory¹

Name	Address	City, State, Zip Code	Type of Facility	Contact	Phone

¹ List should include all hospitals, clinics and veterinary facilities with diagnostic laboratories (including laboratories contracted or managed independently of the medical facility).

FORM 4B: Medical Facility Mercury Checklist

Best Management Practices for Mercury are taken from the AHA/EPA "Making Medicine Mercury-Free" Criteria.

Compliance with these BMPs may be considered as compliance with the local sewer use ordinance limit for mercury; wastewater sampling and analysis may also be waived by the municipality. It is the intention of the Mercury Pollutant Minimization Program to encourage implementation of mercury BMPs. Report date BMP implemented, or if not implemented, date anticipated.

	Yes	No	Date	Best Management Practice			
				1. Has your facility established a mercury plan and equipment and chemicals?	timeline for the reduction and eve	entual elimination of mer	cury-containing
Policy				2. Has your facility implemented an Environmenta regularly review mercury use reduction and elim	nination progress?		_
y				3. Has your facility established mercury management procedures, and education and training of emplo		ercury spill clean up proce	edures, disposal
M				4. Has your facility replaced patient mercury therm	nometers?		
Mercury Products				5. Has your facility replaced all or majority (75%)	of mercury sphygmomanometers?	,	
ıry				6. Has your facility replaced all or majority (75%)	of mercury clinical devices (bougi	ies, miller-abbott tubes, d	lilators, etc)?
Pr_0				7. Has your facility inventoried and labeled all men	cury-containing facility devices (s	switches, thermostats, etc	.)?**
duc				8. Has your facility implemented a program to recy	vcle fluorescent lamps?**		
ts				9. Has your facility implemented battery collection	programs? **		
				10. Has your facility replaced all or majority (75%)	of mercury lab thermometers?		
Lab				11. Has your facility replaced B5/Zenkers stains wit	h non-mercury substitute?		
				12. Has your facility inventoried mercury-containing	g lab chemicals?		
	ay not affe			Analysis (Not required for facilities implem	enting or scheduled to imple	ment all BMPs)	
San	npling	Locati	on	Mercury Effl	uent Concentration	Date	
(Att	ach sum	mary if	multiple was	ewater outfalls)			
				d am familiar with the information submitted in total			
	Nam	e of Fa	cility	Address	Size of Facil	lity (Number of beds, e	employees, or other)
	Print	ed Nan	ne of Officia	Signature	Title	Phone	Date

FORM 4C: Medical Facility Compliance and Outreach Summary

General Outreach to All Medical Facilities

Outreach Accomplished					Outreach Planned			
Outrageh may include navyana	aar artialaa ar ads	varticaments	mailings	works	hops, speaking engagements, etc. 1	Identify type and date		
Outreach may include newspaj					to Individual Medical Facilities			
Name of Facility Implemented Scheduled All WW All WW Analysis				water	Outreach Accomplished	Outreach Planned		
Uutreach may include a site vi	sit, an inspection,	sampling, etc	l c. Identi	fy type	and date.			
Sector Evaluation					Notes:			
% Implemented All WW BMPs% Scheduled to Implement All WW BMPs% In Compliance with Local Wastewater Limits Total % Compliant (Medical Mercury PMP Score)								
Enter on Form 10) under IA: Medi	cal Sector Sc	ore					

FORM 5A: Dental Facility Inventory¹

Name	Address	City, State, Zip Code	Type of Facility	Contact	Phone

¹ List should include all dental facilities that install or remove amalgam fillings. Dental facilities not working with amalgam do not need to be included.

FORM 5B: Dental Facility Mercury Checklist

Best Management Practices are those defined by the ADA <u>and</u> Installation of an Amalgam Separator meeting ISO 11143 Standards.

Compliance with the ADA recommended mercury management practices plus the installation and maintenance of an amalgam separator meeting ISO 11143 standards may be considered as compliance with the local sewer use ordinance limit for mercury; wastewater sampling and analysis may also be waived by the municipality. It is the intention of the Mercury Pollutant Minimization Program to encourage implementation of mercury BMPs. Report date BMP implemented, or if not implemented, date anticipated. If you do not place or remove amalgam fillings, check here, sign and return form.

Yes	No	Date	Best Management Practice				
Has all bulk mercury been eliminated from your stock at your dental office?							
2. Does your dental office use precapsulated alloys?							
			3. Does your dental office recycle disposable amalgam capsules?				
			4. Does your dental office capture and recycle non-contact scrap amalgam?				
			5. Does your dental office capture and recycle contact amalgam including the contents of chair-side traps?				
			6. Does your dental office recycle contact amalgam retained by the vacuum pump filter?				
			7. Does your dental office disinfect and recycle extracted teeth with amalgam fillings?				
			8. Does your dental office use non-chlorine, non-bleach line cleaners that minimize the dissolution of amalgam?				
			9. Does your dental office have and maintain an amalgam separator meeting ISO standards? Manufacturer:Model:				
Name an	d address	of vend	or where amalgam is recycled:				
Wastew	ater Sai	mpling	and Analysis (Not required for facilities scheduling or implementing best management practices as defined above.)				
Samplin	g Locati	on	Mercury Effluent Concentration Date				
(Attach su	ımmary if		wastewater outfalls)				
			d and am familiar with the information submitted in this document and attachments. Based upon my inquiry of the individuals or obtaining the information reported herein, I believe that the submitted information is true, accurate and complete.				
Na	me of Fa	cility	Address Size of Facility (Number of chairs, employees, or other)				
Pri	nted Nan	ne of Of	icial Signature Title Phone Date				

FORM 5C: Dental Facility Compliance and Outreach Summary

General Outreach to All Dental Facilities

Outreach Accomplished					Outreach Plann	ed
Outreach may include newspap					ops, speaking engagements, etc. Ide	entify type and date.
Name of Facility	Implemented All BMPs	Scheduled All BMPs	Wastewa Analys	ater	Outreach Accomplished	Outreach Planned
Outreach may include a site vis	sit, an inspection,	sampling, etc.	Identify t	ype a	nd date.	
Sector Evaluation					Notes:	
% Implemented All BMPs% Scheduled to Implement All BMPs% In Compliance with Local Wastewater Limits						
Total % Complian Enter on Form 16			o			

FORM 6A: School and Educational Facility Inventory¹

Name	Address	City, State, Zip Code	Type of Facility	Contact	Phone

¹ List should include all middle schools, high schools, technical schools, colleges, and universities.

FORM 6B: School Mercury Checklist

Best Management Practices for Mercury are taken from the WDNR's "Green and Healthy Schools" Criteria.

Compliance with these BMPs may be considered as compliance with the local sewer use ordinance limit for mercury; wastewater sampling and analysis may also be waived by the municipality. It is the intention of the Mercury Pollutant Minimization Program to encourage implementation of mercury BMPs. Report date BMP implemented, or if not implemented, date anticipated.

	Yes	No	Date	Best Management Practice			
P				Has your school completed a mercury product	s inventory for the entire sc	hool?	
Policy				2. Does your school have an action plan in place the inventory?			re found as a result of
- X				3. Has all elemental mercury been eliminated fro	m classrooms at your school	01?	
Mercury				4. Have all mercury compounds been eliminated	from classrooms and storer	ooms?	
l ur				5. Have all mercury lab thermometers been elimi	nated from the classrooms?		
				6. Have all mercury lab barometers been elimina	ted from the classrooms?		
rod				7. Have all mercury fever thermometers been elim	minated from the nurse's of	fice?	
Products				8. Have all mercury blood-pressure cuffs been el	iminated from the nurse's o	ffice?	
S				9. Are all mercury-containing items being stored	in airtight, unbreakable cor	ntainers?	
				10. Has the danger of a mercury spill been mitigat	ed by having a mercury spil	ll kit and trained sta	affed to use the kit?
Optional				11. If your school has completed any of these active Classroom presentations on mercury Recycling of fluorescent bulbs	vities, check below: — —	Phase-out of med	cury thermostats rcury batteries
Waste	water S	ampling	g and Aı	nalysis (Not required for facilities implementing or	scheduled to implement all I	BMPs)	
_	_		astewater ou	Mercury Effluen	t Concentration		Date
	•	•		d am familiar with the information submitted in this taining the information reported herein, I believe that		1 -	1 2
-	Name of	Facility	,	Address	Size of Facility	(Number of studer	nts, employees, or other)
	Printed 1	Name of	Official	Signature	Title	Phone	Date

FORM 6C: School and Educational Facility Compliance and Outreach Summary

General Outreach to All School and Educational Facilities

Outre	each Accomplished	l		Outreach Planned		
, i	•	·	U ,	shops, speaking engagements, etc.	2 21	
Name of Facility	Implemented All BMPs	Scheduled All BMPs	1 for individ Wastewate Analysis	ual School and Educational Fa Outreach Accomplished	Outreach Planned	
Outreach may include a site v	visit, an inspection,	sampling, etc.	Identify type	e and date.		
Sector Evaluation				Notes:		
	All BMPs Implement All BM e with Local Waste					
Total % Complia	ant (School Mercur	y PMP Score)				
Enter on Form	10 under IC: Scho	ol Sector Sco	ro			

FORM 7A: Industry Inventory¹

Name	Address	City, State, Zip Code	Type of Facility	Contact	Phone

¹ List should include all industries and businesses identified by the POTW as having potential for mercury wastewater contributions (see instructions).

FORM 7B: Industry Mercury Checklist Best Management Practices for Mercury are Defined as Listed Below

Compliance with these BMPs may be considered as compliance with the local sewer use ordinance limit for mercury; wastewater sampling and analysis may also be waived by the municipality. It is the intention of the Mercury Pollutant Minimization Program to encourage implementation of mercury BMPs. Report date BMP implemented, or if not implemented, date anticipated.

Yes No Date Best Management Practice

	1 1	<u> </u>		
		1. Has your facility established a mercury policy sta	atement that includes the reduction	on or virtual elimination of mercury?
Po		2. Has your facility developed a plan to phase-out r	nercury-containing devices?	
Policy		3. Has your facility implemented a chemical manage	gement program that includes pre-	-purchase review and approval?
		4. Has your facility established mercury managemed disposal procedures, and education and training of		
		5. Has your facility inventoried all mercury-contain	ing devices (such as switches, the	ermostats, etc)?**
Devices		6. Has your facility labeled mercury-containing dev	rices to recycle at the end of life?	**
ices		7. Has your facility implemented a program to recy	cle fluorescent lamps?**	
		8. Does your facility properly recover and recycle e	elemental mercury and mercury-c	ontaining products?**
Cl		9. Has your facility requested certificates of analysis	s for bulk chemicals known to ha	ave potential mercury contamination?
Chemicals		10. Has your facility reduced the use of mercury-cor	ntaining chemicals as much as fea	asible?
		11. If applicable, has your facility inventoried merciplan for non-mercury product substitution?	ury-containing lab chemicals, the	rmometers and other devices with a
	lay not effect wastewater astewater Sampling a	ad Analysis (Not required for facilities implemen	nting or scheduled to implemen	nt all BMPs.)
	mpling Location each summary if multiple w	Mercury Efflu	ent Concentration	Date
		and am familiar with the information submitted in the obtaining the information reported herein, I believe to		1 1 1
	Name of Facility	Address	Pho	ne
	Printed Name of Office	ial Signature	Title	Date

FORM 7C: Industry Compliance and Outreach Summary

General Outreach to All Industrial Facilities

Outread	Outreach Accomplished			Outreach Planned		
0.4 1 1 1	, 1 1 1	·	.1.	1 1	1: , , , , , ,	4.C 4 1.14
Outreach may include newspap				•	os, speaking engagements, etc. Ide Individual Industrial Facilities	
Name of Facility	Implemented All WW BMPs	Scheduled All WW BMPs	Waste Anal	water	Outreach Accomplished	Outreach Planned
-	it, an inspection,		-	y type an	d date. Add additional pages as ne	cessary.
Sector Evaluation				Notes:		
 % Implemented All WW BMPs % Scheduled to Implement All WW BMPs In Compliance with Local Wastewater Limits Total % Compliant (Industry Mercury PMP Score) 						
Enter on Form 10 und	ler ID: Industry S	Sector Score				

Form 8A: General Public Mercury Checklist and Outreach Summary

Best Management Practices for mercury are defined as reducing household use of new mercury-containing products and recycling (rather than discarding) old mercury-containing products.

List participation by households in reducing their use of new mercury containing products (i.e.: retail stores that no longer sell mercury fever thermometers) and participation by households in recycling their old mercury-containing products (i.e.: "CleanSweep" events for mercury thermometers). Include adoption of local ordinances that affect mercury product sale or recycling. *Note: Common household mercury products include fever and other thermometers, thermostats, "silent" light switches, and containers of liquid mercury.* Attach additional sheets as necessary.

Household Mercury Product	Discontinued Sale (Describe)	Recycled Products (Quantity)

Outreach activities to households (and retail stores). List date accomplished. Attach additional sheets as necessary.

Activity:	Website/Ads in Paper/Displays	Mailings/Surveys	Collection Events	Workshops/ Community Events	Site Visits/ Personal Contacts	Other: Describe
Date						
Date						
Date						
Date						
Date						

Sector Evaluation

		ed based on a formula that uses POTW size and				
the number of outreach events	s. <u>The maximum vali</u>	ue for the general public sector score is 100.				
x		=				
# of outreach events	facility factor	General Public Mercury PMP Score				
Enter on Form 10 under IIA: General Public Sector Score						

Facility Factor
10 5 1

FORM 8B: HVAC (Thermostat) Mercury Checklist and Outreach Summary

Best Management Practices for mercury are defined as collecting and recycling mercury thermostats.

List HVAC wholesalers and contractors that collect and recycle mercury thermostats; include retail stores that offer this service. Attach additional sheets as necessary.

Name	Address	City/State Zip Code	Type of Facility			
Estimated total number of HVAC wholesalers and contractors in service area:						

Outreach activities to HVAC wholesalers and contractors. List date accomplished. Attach additional sheets as necessary.

Activity:	Website/Ads in Paper/Displays	Mailings/Surveys	Collection Events	Workshops/ Community Events	Site Visits/ Personal Contacts	Other: Describe
Date						
Date						
Date						
Date						
Date						

~		 		
Sector Evaluation	on		Notes:	

_ HVAC (Thermostat) Mercury PMP Score
(% HVAC wholesalers and contractors collecting and recycling mercury thermostats in service area).

Enter on Form 10 under IIB: HVAC Sector Score

FORM 8C: Auto Switch Mercury Checklist and Outreach Summary

Best Management Practices for mercury are defined as removing and recycling auto mercury switches.

List auto-scrap yards that remove and recycle mercury hood and trunk switches; include dealerships that perform this same service. Attach additional sheets as necessary.

Name	Address	City/State/Zip Code	Type of Facility
+			

Estimated total number of auto scrap yards and dealerships in service area:

Outreach activities to auto scrap yards and dealerships. List date accomplished. Attach additional sheets as necessary.

Activity:	Website/Ads in Paper/Displays	Mailings/Surveys	Collection Events	Workshops/ Community Events	Site Visits/ Personal Contacts	Other: Describe
Date						
Date						
Date						
Date						
Date						

Date						_
Sector Evalua	tion		Notes:			
				7		
ı A	Auto Switch Mercu	ry PMP Score				

(% auto scrap yards and dealerships removing and recycling mercury hood and trunk switches in service area).

Enter on Form 10 under IIC: Auto Switch Sector Score

Form 8D: Fluorescent Bulb Mercury Checklist and Outreach Summary

Best Management Practices for mercury are defined as <u>increasing</u> business and household use of energy-efficient low-mercury fluorescent bulbs and recycling (rather than discarding) burned out fluorescent bulbs.

List participation by businesses and households in recycling their burned out fluorescent bulbs, including both continuous and one-time "CleanSweep" events. Include adoption of local ordinances that affect fluorescent bulb recycling. Attach additional pages as necessary.

Business Fluorescent Bulb Recycling (Quantity, %, or other measures)	Household Fluorescent Bulb Recycling (Quantity, %, or other measures)

Outreach activities to businesses, households (and retail stores) promoting fluorescent bulb recycling. List date accomplished. Attach additional pages as necessary.

Activity:	Website/Ads in Paper/Displays	Mailings/Surveys	Collection Events	Workshops/ Community Events	Site Visits/ Personal Contacts	Other: Describe
Date						
Date						
Date						
Date						
Date						

Sector Evaluation

The score for the Fluorescent Bulb Sector is calculated based on a formula that uses POTW size and						
the number of outreach even	the number of outreach events. <i>The maximum value for the fluorescent bulb sector score is 100.</i>					
x		=				
# of outreach events	facility factor	Fluorescent Bulb Mercury PMP Score				
Enter on Form 10 under IID: Fluorescent Bulb Sector Score						

Facility Size (MGD)	Facility Factor
14.9 549.9	10
50250	1

FORM 9A: Historical Mercury PMP Score

This form gives credit to your POTW for mercury reduction projects completed before implementing a Mercury PMP. The information on the form will not change from year to year. The form is divided into outreach aimed at wastewater sectors and outreach aimed at optional sectors (dairy manometer outreach refers to farms that have participated in replacing and recycling their milk house mercury manometers). For each outreach activity that your POTW has done in the past, put a check in the corresponding box. To calculate your Historical Mercury Score, count the total number of boxes checked and enter that number in the box on the bottom of the page and also on Form 10.

			OUTREACH ACTIVITIES					SEC	CTOR ACCO	MPLISHMEN	ITS
		Ads in Paper/ Displays/ Website	Mailings/ Surveys	Collection Events	Workshops/ Community Events	Site Visits/ Personal Contacts	Other: Describe	Replaced Mercury Products	Recycled Mercury Products	Installed Mercury Treatment	Other - Describe
)£	Medical										
Wastewater Sectors	Dental										
Waste	School										
	Industry										
Sectors	General Public										
	HVAC										
unity	Auto Switch										
отт	Fluorescent Bulb	х	х								
Other Community	Dairy Manometer										
100	Other - Define										

Sector Evaluation: Notes:

Number of Mercury Outreach Activities and Mercury Sector Accomplishments: (Total boxes checked)

For Annual Report: Enter on Form 10 under IIIA: Historical Score

FORM 9B: Extra-jurisdictional Mercury PMP Score

This form gives credit for mercury projects your POTW has completed outside the treatment plant service area. For the initial plan, include all activities you have implemented. For the annual report, include all activities that have occurred only in the past 12 months. The form is divided into outreach aimed at wastewater sectors and outreach aimed at optional sectors. For each outreach activity or sector accomplishment, put a check in the corresponding box. To calculate your Extra-jurisdictional Mercury Score, count the total number of boxes checked and enter that number in the box on the bottom of the page and also on Form 10.

			OUTREACH ACTIVITIES					SECTOR ACCOMPLISHMENTS			
		Ads in Paper/ Displays/ Website	Mailings/ Surveys	Collection Events	Workshops/ Community Events	Site Visits/ Personal Contacts	Other: Describe	Replaced Mercury Products	Recycled Mercury Products	Installed Mercury Treatment	Other - Describe
7.	Medical										
sstewate Sectors	Dental										
Wastewater Sectors	School										
	Industry										
tors	General Public										
Sectors	HVAC										
unity	Auto Switch										
отт	Fluorescent Bulb										
Other Community	Dairy Manometer										
0#	Other - Define										

Sector Evaluation:	Notes:
Number of Mercury Outreach Activities and Mercury Sector Accomplishments: (Total boxes checked)	

or Annual Report: Enter on Form 10 under IIIB: Extra-jurisdictional Score

FORM 10: Community Mercury PMP Score

Facility Name: Stoughton	e:						
I. Wastewater Sectors:	(Should to b	e inclu	ded in Mercury PMF	Plan)			
Sector	Sector Score	x	Weighting Factor*	=	Weighted Sector Score		
A: Medical (from Form 4C)		X	(0.15)	=			
B: Dental (from Form 5C)		X	(0.50)	=			
C: School (from Form 6C)		X	(0.15)	=			
D: Industry (from Form 7C)		X	(0.20)	=			
	Total	Waste	ewater Sectors Score				
* Weighting factor is the relative fraction of mercury to POTW that is attributable to each sector. If you know what fraction comes from each sector you can adjust accordingly. The weighting factors must add up to 1. Use default values in parenthesis above if unknown. II. Other Community Sectors: (May be included in Mercury PMP Plan)							
Sector	Sector Sco	<u>re</u> x	Weighting Factor**	=	Weighted Sector Score		
A: General Public (from Form 8A)		X	0.1	=			
B: HVAC (from Form 8B)		X	0.1	=			
C: Auto Switch (from Form 8C)		X	0.1	=			
D: Fluorescent Bulb (from Form 8D)		X	0.1	=			
	Total Other	Comn	nunity Sectors Score				
** Weighting factor is between 0.0	and 0.1. Wisconsi	in's wei	ghting factor is 0.1.				
III. Other Credits: (May	y be included in	n Merc	ury PMP Plan)				
<u>Other</u>	Score	X	Weighting Factor**	=	Weighted Score		
A: Historical (from Form 9A)		X	0.1	=			
B: Extra-jurisdictional (from Form 9	9B)	X	0.1	=			
•							
	Tota	I Othe	r PMP Credits Score				
** Weighting factor is between 0.0	and 0.1. Wisconsi	in's wei	ghting factor is 0.1.				
IV. Community Mercury	y PMP Score	:			Total Score		
Sum of Wastewater Sectors, Ot	her Community	y Secto	ors and Other PMP C	redits			



Figure B-1

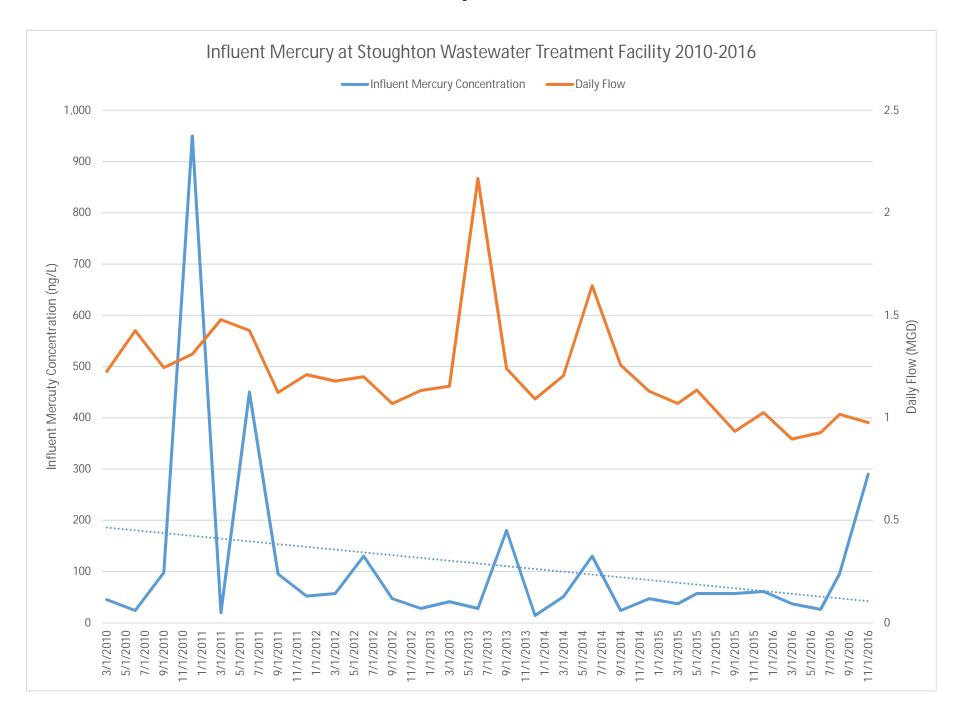


Figure B-2

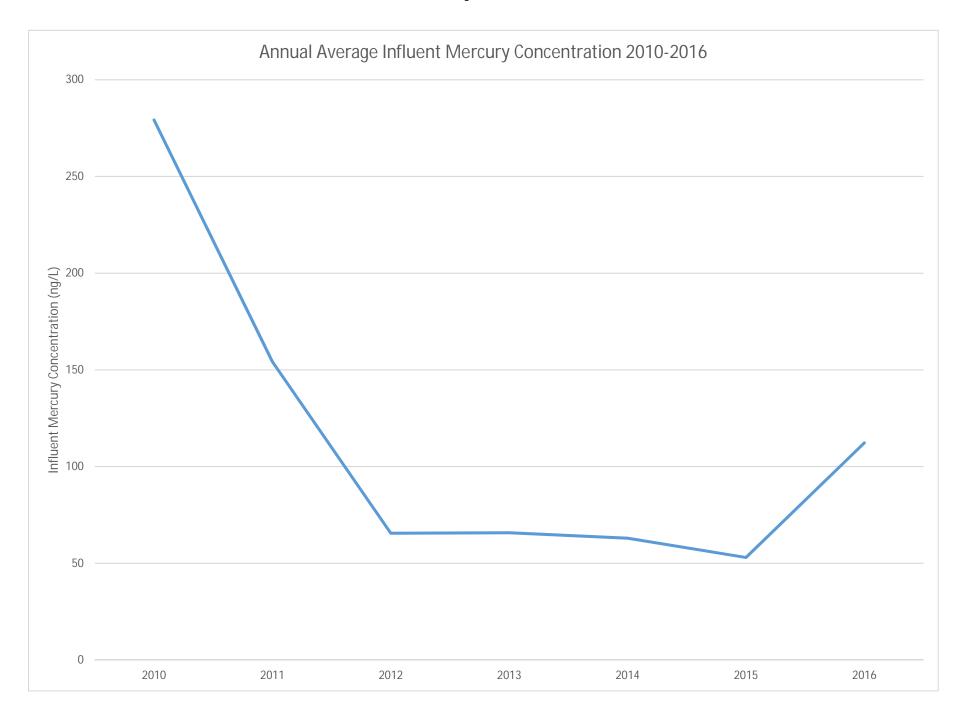


Figure B-3

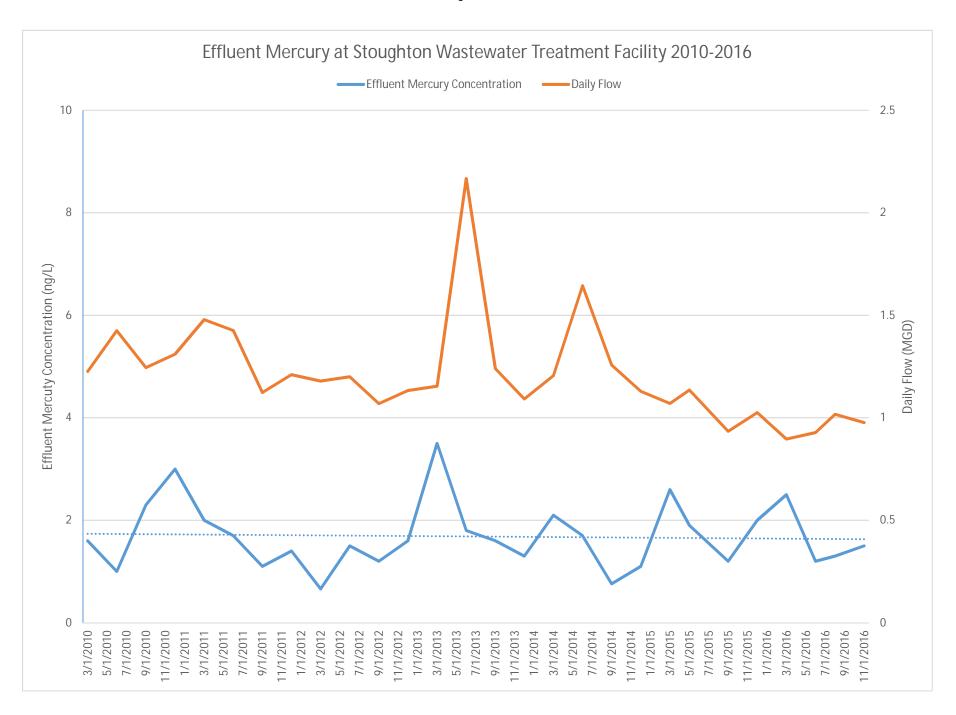


Figure B-4

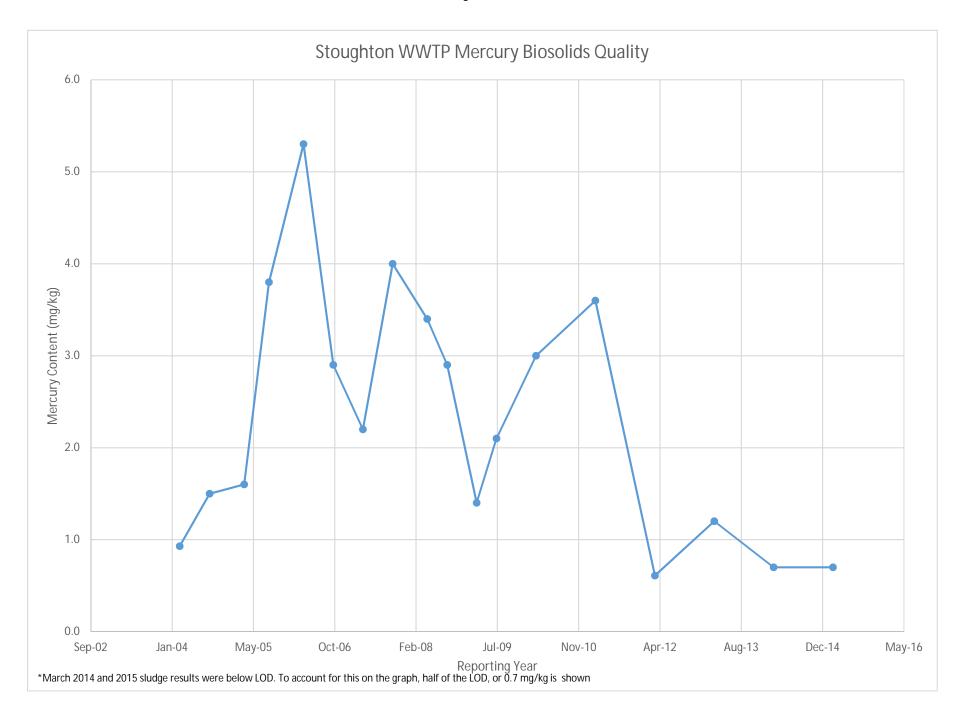


Table B-1

Quarterly Influent and Effluent Mercury Concentration Sample Results

	INFLUENT	EFFLUENT	FLOW	
DATE	(ng/L)	(ng/L)	(MGD)	COMMENTS
3/26/2016	37	2.5	0.896	
6/2/2016	26	1.2	0.928	
8/31/2016	96	1.3	1.017	
4-Nov	290	1.5	0.976	
3/31/2015	37	2.6	1.07	
5/18/2015	57	1.9	1.135	
9/22/2015	57	1.2	0.934	
12/31/2015	61	2	1.025	
3/11/2014	51	2.1	1.206	
6/30/2014	130	1.7	1.644	
9/30/2014	24	0.76	1.257	
12/9/2014	47	1.1	1.129	
3/27/2013	41	3.5	1.154	
6/27/2013	28	1.8	2.167	
9/30/2013	180	1.6	1.24	
12/31/2013	14	1.3	1.092	
3/27/2012	57	0.66	1.179	
6/29/2012	130	1.5	1.2	
9/26/2012	47	1.2	1.069	
12/18/2012	28	1.6	1.133	
3/16/2011	20	2	1.479	
6/30/2011	450	1.7	1.426	
9/30/2011	95	1.1	1.123	
12/30/2011	52	1.4		No flow data, used average daily flow of 1.21 MGD for graph
				now or 1.21 MGD for graph
3/8/2010	45	1.6	1.226	
6/28/2010	24	1	1.425	
9/14/2010	98	2.3	1.245	
12/7/2010	950	3	1.31	

Table B-2
Annual Biosolids Sludge Concentration Sample Results

1
Sludge
(mg/kg)
<lod< td=""></lod<>
<lod< td=""></lod<>
1.2
0.61
3.6
3
2.1
1.4
2.9
3.4
4
2.2
2.9
5.3
3.8
1.6
1.5
0.93



STOUGHTON UTILITIES WASTEWATER TREATMENT PLANT COMMERCIAL/INSTITUTIONAL SURVEY MERCURY SOURCE MINIMIZATION STUDY

With the next issuance of the City of Stoughton's Wisconsin Pollutant Discharge Elimination System (WPDES) permit, additional requirements for mercury control are expected. The purpose of these requirements is to lower mercury contributions to Wisconsin's rivers and lakes. In the environment, a percentage of mercury undergoes a biological/chemical process and is converted to methyl mercury, which is a more toxic form of mercury. Once mercury is introduced to the sanitary sewer system, it becomes difficult and expensive to treat at the treatment plant.

Stoughton Utilities can generally meet the current effluent mercury limit set by the Wisconsin Department of Natural Resources (WDNR) of around 3.3 ng/L. However, the new regulations may result in an effluent mercury limit as low as 1.3 ng/L. For this low limit, a costly tertiary treatment process may be required, resulting in significant increases in sewer user charges including higher surcharge rates for mercury.

As a first step to compliance, it is prudent to review the sources of mercury in the wastewater discharged to the sanitary sewer system to see if they can be minimized. Some commercial, institutional, or industrial establishments discharge mercury to the sewerage system because it is present in fluorescent tubes and bulbs, button batteries from watches and hearing aids, chemistry sets, older thermometers and temperature switches, and older toys and games. In some cases, it may be feasible for these facilities to eliminate or reduce sources if it can be done without significant cost to the facility or adverse impact on the operations. Minimizing mercury in the wastewater by disposing of these products appropriately may be much more economical than removing it using tertiary treatment at the wastewater treatment plant. The Dane County Clean Sweep Program allows for disposal of products containing mercury by appropriate methods.

The purpose of this survey is to obtain the information required to explore mercury minimization.

Please complete the form by filling in answers to the following questions, and provide a copy to Brian Erickson at Stoughton Utilities, berickson@stoughtonutilities.com or P.O. Box 383, Stoughton, WI 53589 by ______.

1.	Name	e and Address of Business or Facility:
2.	Whor	m should we contact for additional information?
	Name Telep E-ma	e: bhone No.: il:
3.	Servi	ce(s) performed:
4.	Mercu	ry
	a.	Do you have any products containing mercury that could result in mercury discharge to the sewer? These products may include fluorescent tubes and bulbs, button batteries from watches and hearing aids, chemistry sets, older thermometers and temperature switches, older toys and games, and so on.
		Yes () No ()
	b.	If yes to a. above, please provide a list of all products containing mercury.
	C.	For any of the above products, are you aware of disposal methods that could prevent undesirable mercury to enter the sanitary sewer system? Please describe current disposal methods for mercury products at your facility.
		Yes() No()

Your assistance with this survey is appreciated. If you have questions, please call Jane Carlson at Strand Associates, Inc.®, Madison, Wisconsin, 608-251-4843.

Substantial Compliance Determination

Permittee Name: CITY OF STO	OUGHTON	Permit Number: 0020338-09-0
	Compliance?	Comments
Discharge Limits	Yes	No effluent violations during current permit
		term.
Sampling/testing requirements	Yes	The required sampling is being performed.
Groundwater standards	NA	No groundwater requirements in current
		WPDES permit.
Reporting requirements	Yes	Required reports are submitted on time. Some
		late submittals of Land Application forms but
		this is not a chronic issue.
Compliance schedules	Yes	Compliance schedules were included for
		phosphorus and mercury variance. The City is
		participating in the Yahara WINS adapative
		mangement project and will need a
		compliance schedule for annual reports.
		Annual reports for the mercury variance will
		also need to be continued because the City
		intends to reapply.
Management plan	Yes	A Pollutant Minimization Plan (PMP) is
		required as part of the Mercury variance and is
		being followed. The City plans on reapplying
Od	37	for the Mercury variance.
Other:	Yes	Operator in Charge (OIC) is at proper certification.
		Required:
Enforcement Considerations	None	Advanced - A1, B, C, D, L, P & SS
In substantial compliance?	Yes	
in substantial compilance?	Comments:	After review of all required compliance
		ge monitoring reports and a site inspection
		4/17, the City has been found to be in
		pliance with all terms and conditions of their
	current WPDES	
	Current WIDES	, politic.
	Signature: A	Amy Garbe
	Date:	04/10/2017
	Concurrence:	Date:



210 Martin Luther King Jr. Blvd. Room 362 Madison, WI 53703 Phone: 608-266-4137 Fax: 608-266-9117 www.CapitalAreaRPC.org info@CapitalAreaRPC.org

Sent via email November 2, 2018

Mr. Phillip Spranger Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711

RE: Notice of Intent to Reissue WPDES Permit No. WI-0020338-09-0

City of Stoughton WWTF 700 Mandt Parkway Stoughton, WI 53589

Dear Mr. Spranger:

CARPC has reviewed the proposed limits and conditions outlined in the Notice of Intent to Reissue the subject WPDES permit. We support the proposed discharge limit and monitoring modifications from the previous permit issuance. The modifications of the permit and the conditions under which discharge will be permitted would be consistent with the published *Dane County Water Quality Plan* as updated and revised.

We commend the City of Stoughton for establishment of a mercury pollutant minimization program prior to issuance of their previous permit. It is recommended that the City follow their mercury operational evaluation optimization report and update it as necessary to achieve mercury reductions consistent with the upcoming permit limits. We also commend the City for taking part in the MMSD's Yahara WINs Adaptive Management approach to reduce total phosphorus within the Yahara River Basin. The WWTP is consistently operating near full design biological loadings and the City has been working with industrial customers to reduce BOD loads. In 2015, influent (C)BOD loading was greater than 90 percent of design six months of the year and exceeded 100 percent of design loading in one month. However, in 2016, influent (C)BOD loading was greater than 90% of design only three months of the year and did not exceed 100 percent of design loading in any month. In both years, plant effluent was consistently well below its discharge permit limit for (C)BOD. Also, based on DOA population projections for the City and average annual per capita wastewater generation rates, hydraulic capacity of the existing wastewater treatment facility is expected to reach 90 percent of design capacity by 2020 and is expected to approach full capacity near 2040. The City's engineering consultant prepared a long range strategic plan in 2015 to evaluate plant operations, including loadings. It is recommended that the City implement the recommendations of that report. It is also recommended that the City continue its efforts to reduce I/I to achieve improved operational efficiency and reduce cost and work to reduce per capita water use across the service area.

Sincerely,

Tony Vandermuss, PE, ENV SP, LEED AP

Environmental Engineer

cc: Ms. Amy Garbe, Wisconsin Department of Natural Resources (via email)

Mr. Brett Hebert, Stoughton Director of Public Works (via email)

Mr. Brian Erickson, Stoughton Wastewater System Supervisor (via email)



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

Serving Electric, Water & Wastewater Needs Since 1886

December 12, 2018

Mr. Phillip Spranger Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711

Re: Notice of Intent to Reissue Wisconsin Pollutant Discharge Elimination System (WPDES)
Permit No. WI-0020338-09-0
City of Stoughton Wastewater Treatment Plant
700 Mandt Parkway
Stoughton, WI 53589

Dear Mr. Spranger:

We have reviewed the proposed WPDES permit and associated documents and we respectfully request the Wisconsin Department of Natural Resources (WDNR) consider the following comments, which are submitted on behalf of the City of Stoughton Utilities:

Comment 1 (Related to Section 1.2.1 Sampling Point 701 - Influent, page 1):

• What is the purpose of CBOD₅ monitoring of influent? This monitoring requirement will result in additional lab work, so we would like to know the reason for the addition.

Comment 2 (Related to Section 3.2.1 Sampling Point (Outfall) 001, page 4):

• We request that the monthly low flows for the Yahara River be used to calculate the ammonia limits, in lieu of the annual average low flow which was used in the WQBEL Memo. Using the monthly flows is more scientifically appropriate and is consistent with WDNR past practice.

Comment 3 (Related to Section 3.2.1.2 pH Dependent Variable Ammonia Limitations, page 6):

There is a discrepancy between the daily maximum ammonia limits in the draft permit compared to the current permit. For example, in the current permit, the daily maximum limit of 34 mg/L was applicable for the pH range $7.5 < pH \le 7.6$; in the draft permit, the daily maximum limit of 34 mg/L is applicable for the pH range $7.6 < pH \le 7.7$.

We believe that the intent was to set the daily maximum limit to the lowest value for the range (i.e. the ATC calculated for the larger pH value) and that the limits in the table should be shifted up one row, similar to the limits presented in the current WPDES permit.



Office 608-873-3379 Fax 608-873-4878 stoughtonutilities.com Mr. Phillip Spranger Wisconsin Department of Natural Resources Page 2 December 12, 2018

Comment 4 (Related to Section 3.2.1.4 Phosphorus Limitation(s), page 6):

• We request that paragraph two of this section be revised to clarify that the target load reduction for this permit term differs from the contributing load to the watershed.

Suggested edits include replacing the first and second sentences in this paragraph with the following:

"The goal for phosphorus load reductions for Stoughton Utilities for this permit term is equal to 40% of the total phosphorus load reduction goal for Stoughton Utilities to the watershed, according to the approved adaptive management plan. The load reduction goal for this permit term is identified as 10 pounds of phosphorus per year for Stoughton Utilities."

Comment 5 (Related to Section 3.2.1.4 Phosphorus Limitation(s), page 7):

Previous drafts of this permit included the following at the end of the first paragraph on page 7: "These limitations may be recalculated based on changes in the in-stream data at the time of permit reissuance."

We request that this language be added at the end of the last paragraph of Section 3.2.1.4.

Comments 6 and 7 (Related to Section 3.2.1.5 Additional Watershed Adaptive Management Requirements, page 7)

- In the first sentence of paragraph 1, the DNR may wish to clarify that AM Plan No. WQT-2017-0003 is a partnership between **several** WPDES permittees.
- We request that paragraph two of this section be revised to clarify that the target load reduction for this permit term differs from the contributing load to the watershed.

Suggested edits include replacing the first and second sentence in this paragraph with the following:

"The goal for phosphorus load reductions for this permit term within the Yahara River action area, as identified in WQT-2017-0003, shall be 40% of the total phosphorus load reduction from the combination of all four point sources (Stoughton Utilities, Village of Oregon, Madison Metropolitan Sewerage District and WDNR Nevin Fish Hatchery). The load reduction goal for this permit term is identified as 5,329 pounds of phosphorus per year for the contributing point sources in the adaptive management plan."

Comment 8 (Related to Section 3.2.1.3 TSS Limitation(s) from Current Permit):

• Section 3.2.1.3 TSS Limitations from the current permit was not included in this draft. We request that this section be added to indicate that the TSS limits are a result of the Rock River TMDL.

Comment 9 (Related to Section 3.2.1.10 Chloride Monitoring Requirements, page 8):

Section 2.2.1.6 requires four consecutive days of sampling exclusive to one week. Because weeks are defined by date and not day of the week, there is the possibility that sampling will be required on a weekend in order to achieve four consecutive days of sampling (i.e., if the first day of the month is a Wednesday). Currently, the facility is not staffed full-time on weekends and would not be able to monitor the sampling equipment on weekends.

Mr. Phillip Spranger Wisconsin Department of Natural Resources Page 3 December 12, 2018

We request that the language in this section be modified so sampling on weekends is not required. This could be achieved by revising the definition for a sampling week so that all weeks include at least four weekdays. Or, if the current definition of sampling week is maintained, sampling could be allowed to occur over four consecutive days in a two-week period.

Comment 10 (Related to Section 5.2 Mercury Pollutant Minimization Program, Page 14):

The DNR may wish to clarify that the annual reports should cover PMP activities conducted between January 1 and December 31 of the previous year, as was indicated in the current permit.

Thank you for the opportunity to provide our comments on these documents. Please contact me if you have any questions.

Sincerely,

City of Stoughton Utilities

Brian Hoops

Brian Erickson, Stoughton Utilities cc: Jane Carlson, Strand Associates, Inc

Sam Hocevar, Strand Associates, Inc



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

Serving Electric, Water & Wastewater Since 1886

Date: January 8, 2019

To: Stoughton Utilities Committee

From: Brian R. Hoops

Stoughton Utilities Assistant Director

Subject: Utilities Committee Future Agenda Item(s)

This item appears on all agendas of Committees of the City of Stoughton.