

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: HEART OF THE VALLEY METRO SEWERAGE DISTRICT
 Contact Address: 801 Thilmany Rd
 Kaukauna, WI 54130
 Facility Contact: Brian Helming, District Director
 Phone Number: 920-766-5731
 Reporting Period: 08/01/2018 - 08/31/2018
 Form Due Date: 09/21/2018
 Permit Number: 0031232

Date Received:
 DOC: 405909
 FIN: 6375
 FID: 445005220
 Region: Northeast Region
 Permit Drafter: Richard P Sachs
 Reviewer: Roy Van Gheem
 Office: Green Bay

	Sample Point	001	701	701	701	701
	Description	Effluent	Influent	Influent	Influent	Influent
	Parameter	211	211	66	457	87
	Description	Flow Rate	Flow Rate	BOD5, Total	Suspended Solids, Total	Cadmium, Total Recoverable
	Units	MGD	MGD	mg/L	mg/L	ug/L
	Sample Type	CONTINUOUS	CONTINUOUS	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	DAILY	DAILY	5/WEEK	5/WEEK	MONTHLY
Sample Results	Day 1	1.035	4.658	282	304	
	2	2.127	4.681	269	312	
	3	1.809	4.337	257	260	
	4	0.719	4.333	264	148	
	5	1.009	4.619	226	160	
	6	0.875	4.500	264	324	
	7	0.781	4.170	233	256	1.4
	8	1.175	4.140	211	152	
	9	0.937	4.230	338	192	
	10	0.856	4.150	269	228	
	11	0.545	3.840	223	228	
	12	1.031	4.180	254	268	
	13	0.412	3.978	266	224	
	14	0.458	4.016	232	268	
	15	0.647	3.940	248	324	
	16	0.316	4.008	272	244	
	17	0.137	3.758	224	180	
	18	0.406	3.706	190	168	
	19	0.815	3.926	240	248	
	20	0.919	4.061	266	300	
	21	0.823	4.019	326	268	
	22	1.024	3.921	334	260	
	23	2.568	3.932	255	288	
	24	0.838	3.698	269	300	
	25	0.389	3.694	246	220	
	26	3.413	6.748	266	372	
	27	5.368	8.975	101	64	
	28	16.450	20.056	105	96	
	29	8.127	11.729	159	168	
	30	5.201	8.328	201	168	
	31	3.796	6.923	290	144	

	Sample Point	001	701	701	701	701
	Description	Effluent	Influent	Influent	Influent	Influent
	Parameter	211	211	66	457	87
	Description	Flow Rate	Flow Rate	BOD5, Total	Suspended Solids, Total	Cadmium, Total Recoverable
	Units	MGD	MGD	mg/L	mg/L	ug/L
Summary Values	Monthly Avg	2.096967742	5.330774194	244.516129032	230.193548387	1.4
	Daily Max	16.45	20.056	338	372	1.4
	Daily Max - Variable					
	Daily Min	0.137	3.694	101	64	1.4
	Geometric Mean -					
	Week 1 Avg					
	Week 2 Avg					
	Week 3 Avg					
	Week 4 Avg					
Limit(s) in Effect	Monthly Avg					
	Daily Max					
	Daily Max - Variable					
	Daily Min					
	Geometric Mean -					
	Weekly Avg					
QA/QC Information	LOD					1.3
	LOQ					5
	QC Exceedance	N	N	Y	N	N
	Lab Certification			445005220	445005220	405132750

	Sample Point	701	701	701	701	701
	Description	Influent	Influent	Influent	Influent	Influent
	Parameter	133	147	264	315	553
	Description	Chromium, Total Recoverable	Copper, Total Recoverable	Lead, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable
	Units	ug/L	ug/L	ug/L	ug/L	ug/L
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1					
	2					
	3					
	4					
	5					
	6					
	7	33.2	105	5.0	21.3	227
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	701	701	701	701	701
	Description	Influent	Influent	Influent	Influent	Influent
	Parameter	133	147	264	315	553
	Description	Chromium, Total Recoverable	Copper, Total Recoverable	Lead, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable
	Units	ug/L	ug/L	ug/L	ug/L	ug/L
Summary Values	Monthly Avg	33.2	105	5	21.3	227
	Daily Max	33.2	105	5	21.3	227
	Daily Max - Variable					
	Daily Min	33.2	105	5	21.3	227
	Geometric Mean -					
	Week 1 Avg					
	Week 2 Avg					
	Week 3 Avg					
	Week 4 Avg					
Limit(s) in Effect	Monthly Avg					
	Daily Max					
	Daily Max - Variable					
	Daily Min					
	Geometric Mean -					
	Weekly Avg					
QA/QC Information	LOD	2.5	6.3	4.3	2.6	9.3
	LOQ	10	20	13	10	40
	QC Exceedance	N	N	N	N	N
	Lab Certification	405132750	405132750	405132750	405132750	405132750

	Sample Point	001	001	001	001	001
	Description	Effluent	Effluent	Effluent	Effluent	Effluent
	Parameter	649	457	377	204	112
	Description	CBOD5	Suspended Solids, Total	pH Field	Fecal Coliform	Chlorine, Total Residual
	Units	mg/L	mg/L	su	#/100ml	ug/L
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	GRAB	GRAB	GRAB
	Frequency	DAILY	5/WEEK	5/WEEK	WEEKLY	5/WEEK
Sample Results	Day 1	5	26	7.5	195	<100
	2	5	30	7.4		<100
	3	3	18	7.6		<100
	4	4	22	7.4		
	5	4	17	7.2		
	6	4	16	7.7		<100
	7	3	24	7.4		<100
	8	4	15	7.2		<100
	9	4	14	7.5		<100
	10	5	22	7.1		<100
	11	5	20	7.6		
	12	6	22	7.5		
	13	9	25	7.0		<100
	14	6	19	7.2		<100
	15	5	19	7.6	55	<100
	16	5	20	7.4		<100
	17	4	20	7.2		<100
	18	4	23	7.6		
	19	4	22	7.6		
	20	3	19	7.7		<100
	21	5	24	7.8		<100
	22	4	22	7.8	945	<100
	23	3	22	7.6		<100
	24	3	23	7.2		<100
	25	4	28	7.7		
	26	4	24	7.3		
	27	3	13	7.4		<100
	28	7.8	22.8	7.2		<100
	29	4	17	7.5	1200	<100
	30	6	26	7.5		<100
	31	6	28	7.5		<100

	Sample Point	001		001		001		001		001	
	Description	Effluent		Effluent		Effluent		Effluent		Effluent	
	Parameter	649		457		377		204		112	
	Description	CBOD5		Suspended Solids, Total		pH Field		Fecal Coliform		Chlorine, Total Residual	
	Units	mg/L		mg/L		su		#/100ml		ug/L	
Summary Values	Monthly Avg	4.574193548		21.380645161		7.448387097		598.75		0	
	Daily Max	9		30		7.8		1200		<100	
	Daily Max - Variable										
	Daily Min	3		13		7		55		<100	
	Geometric Mean -							332.087545947			
	Week 1 Avg	4		21.857142857							
	Week 2 Avg	5.571428571		19.571428571							
	Week 3 Avg	4.285714286		21							
	Week 4 Avg	4.114285714		22.114285714							
Limit(s) in Effect	Monthly Avg	25	0	30	0						
	Daily Max					9	0			38	0
	Daily Max - Variable										
	Daily Min					6	0				
	Geometric Mean -							400	0		
	Weekly Avg	40	0	45	0						
QA/QC Information	LOD									100	
	LOQ									100	
	QC Exceedance	Y		N		N		N		N	
	Lab Certification	445005220		445005220							

	Sample Point	001	001	001	001	001
	Description	Effluent	Effluent	Effluent	Effluent	Effluent
	Parameter	388	789	87	133	147
	Description	Phosphorus, Total	Nitrogen, Ammonia (NH3-N) Total	Cadmium, Total Recoverable	Chromium, Total Recoverable	Copper, Total Recoverable
	Units	mg/L	mg/L	ug/L	ug/L	ug/L
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	5/WEEK	5/WEEK	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.35	0.3			
	2	0.26	0.5			
	3	0.25				
	4	0.32				
	5	0.26	0.7			
	6	0.25	0.8			
	7	0.30	0.8	<1.3	<2.5	<6.3
	8	0.41	0.5			
	9	0.31	1.1			
	10	0.32				
	11	0.33				
	12	0.32	0.5			
	13	0.62	1.8			
	14	0.19	0.6			
	15	0.29	0.2			
	16	0.31	0.2			
	17	0.39				
	18	0.35				
	19	0.34	0.2			
	20	0.35	0.2			
	21	0.35	2.5			
	22	0.40	0.3			
	23	0.46	0.5			
	24	0.41				
	25	0.41				
	26	0.34	0.3			
	27	0.28	0.1			
	28	0.275	0.28			
	29	0.21	0.2			
	30	0.27	0.3			
	31	0.33				

	Sample Point	001		001		001		001		001	
	Description	Effluent		Effluent		Effluent		Effluent		Effluent	
	Parameter	388		789		87		133		147	
	Description	Phosphorus, Total		Nitrogen, Ammonia (NH3-N) Total		Cadmium, Total Recoverable		Chromium, Total Recoverable		Copper, Total Recoverable	
	Units	mg/L		mg/L		ug/L		ug/L		ug/L	
Summary Values	Monthly Avg	0.330806452		0.585454545		0		0		0	
	Daily Max	0.62		2.5		<1.3		<2.5		<6.3	
	Daily Max - Variable										
	Daily Min	0.19		0.1		<1.3		<2.5		<6.3	
	Geometric Mean -										
	Week 1 Avg			0.62							
	Week 2 Avg			0.9							
	Week 3 Avg			0.66							
	Week 4 Avg			0.296							
Limit(s) in Effect	Monthly Avg	1	0	4.40	0						
	Daily Max			17	0						
	Daily Max - Variable										
	Daily Min										
	Geometric Mean -										
	Weekly Avg			11	0						
QA/QC Information	LOD	0.026		0.034		1.3		2.5		6.3	
	LOQ	0.087		0.113		5		10		20	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	445005220		445005220		405132750		405132750		405132750	

	Sample Point	001	001	001	101	601
	Description	Effluent	Effluent	Effluent	Effluent Reuse	River Monitoring
	Parameter	264	315	553	671	400
	Description	Lead, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Flow Unregulated	WLA Previous Day River Flow
	Units	ug/L	ug/L	ug/L	MGD	cfs
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	CONTINUOUS	GAUGE STN
	Frequency	MONTHLY	MONTHLY	MONTHLY	DAILY	DAILY
Sample Results	Day 1				3.623	1690
	2				2.554	2090
	3				2.528	2690
	4				3.614	2750
	5				3.610	2780
	6				3.625	2710
	7	<4.3	8.9	22.4	3.389	2590
	8				2.965	2620
	9				3.293	2620
	10				3.294	2060
	11				3.295	1800
	12				3.149	1790
	13				3.566	1880
	14				3.558	1750
	15				3.293	1780
	16				3.692	1630
	17				3.621	1590
	18				3.300	1580
	19				3.111	1680
	20				3.142	1620
	21				3.196	1510
	22				2.897	1620
	23				1.364	1720
	24				2.860	1850
	25				3.305	1720
	26				3.335	1690
	27				3.607	4150
	28				3.606	7660
	29				3.602	11300
	30				3.127	12600
	31				3.127	12400

	Sample Point	001	001	001	101	601
	Description	Effluent	Effluent	Effluent	Effluent Reuse	River Monitoring
	Parameter	264	315	553	671	400
	Description	Lead, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Flow Unregulated	WLA Previous Day River Flow
	Units	ug/L	ug/L	ug/L	MGD	cfs
Summary Values	Monthly Avg	0	8.9	22.4	3.233806452	3223.225806452
	Daily Max	<4.3	8.9	22.4	3.692	12600
	Daily Max - Variable					
	Daily Min	<4.3	8.9	22.4	1.364	1510
	Geometric Mean -					
	Week 1 Avg					
	Week 2 Avg					
	Week 3 Avg					
	Week 4 Avg					
Limit(s) in Effect	Monthly Avg					
	Daily Max					
	Daily Max - Variable					
	Daily Min					
	Geometric Mean -					
	Weekly Avg					
QA/QC Information	LOD	4.3	2.6	9.3		
	LOQ	13	10	40		
	QC Exceedance	N	N	N	N	N
	Lab Certification	405132750	405132750	405132750		

	Sample Point	601	601	006	006	006
	Description	River Monitoring	River Monitoring	WLA CBOD5 Discharge Compliance	WLA CBOD5 Discharge Compliance	WLA CBOD5 Discharge Compliance
	Parameter	399	401	545	12	889
	Description	WLA Previous 4 Day Avg River Flow	WLA Previous Day River Temp	WLA CBOD5 Value	WLA Adjusted Value	WLA CBOD5 Discharged
	Units	cfs	degF	lbs/day	lbs/day	lbs/day
	Sample Type	CALCULATED	CALCULATED	SEE TABLE	CALCULATED	CALCULATED
	Frequency	DAILY	DAILY	DAILY	DAILY	DAILY
Sample Results	Day 1	3475	78	2057	2839	42
	2	3050	79	2057	2839	96
	3	2483	77	1856	2561	51
	4	2223	75	1681	2320	24
	5	2305	76	1856	2561	30
	6	2578	77	1995	2753	30
	7	2733	77	1995	2753	21
	8	2708	77	1995	2753	39
	9	2675	77	1995	2753	34
	10	2635	77	1995	2753	36
	11	2473	79	1675	2312	24
	12	2275	80	1675	2312	49
	13	2068	80	1587	2190	30
	14	1883	81	1488	2053	25
	15	1805	81	1488	2053	28
	16	1800	81	1488	2053	13
	17	1760	80	1488	2053	5
	18	1688	80	1377	1900	13
	19	1645	80	1377	1900	26
	20	1620	79	1377	1900	24
	21	1618	78	1377	1900	32
	22	1598	77	1417	1955	33
	23	1608	74	1417	1955	62
	24	1618	74	1417	1955	21
	25	1675	73	1459	2013	14
	26	1728	71	1459	2013	122
	27	1745	72	1459	2013	141
	28	2353	73	2018	2785	1070
	29	3805	74	2588	3571	291
	30	6200	73	4486	6191	263
	31	8928	73	5568	7684	205

	Sample Point	601	601	006	006	006
	Description	River Monitoring	River Monitoring	WLA CBOD5 Discharge Compliance	WLA CBOD5 Discharge Compliance	WLA CBOD5 Discharge Compliance
	Parameter	399	401	545	12	889
	Description	WLA Previous 4 Day Avg River Flow	WLA Previous Day River Temp	WLA CBOD5 Value	WLA Adjusted Value	WLA CBOD5 Discharged
	Units	cfs	degF	lbs/day	lbs/day	lbs/day
Summary Values	Monthly Avg	2540.580645161	76.870967742	1908.612903226	2633.741935484	93.35483871
	Daily Max	8928	81	5568	7684	1070
	Daily Max - Variable					1070
	Daily Min	1598	71	1377	1900	5
	Geometric Mean -					
	Week 1 Avg					
	Week 2 Avg					
	Week 3 Avg					
	Week 4 Avg					
Limit(s) in Effect	Monthly Avg					
	Daily Max					
	Daily Max - Variable					0 0
	Daily Min					
	Geometric Mean -					
	Weekly Avg					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance	N	N	N	N	N
	Lab Certification					

	Sample Point	006	006
	Description	WLA CBOD5 Discharge Compliance	WLA CBOD5 Discharge Compliance
	Parameter	543	542
	Description	WLA 7 Day Sum Of WLA Values	WLA 7 Day Sum Of CBOD5 Discharged
	Units	lbs/day	lbs/day
	Sample Type	CALCULATED	CALCULATED
	Frequency	DAILY	DAILY
Sample Results	Day 1	15895	323
	2	16368	350
	3	16264	324
	4	15754	317
	5	14909	314
	6	14203	301
	7	13497	294
	8	13535	333
	9	13373	229
	10	13512	214
	11	13506	214
	12	13325	233
	13	12917	233
	14	12410	237
	15	11903	226
	16	11396	205
	17	10889	174
	18	10591	163
	19	10293	140
	20	10083	134
	21	9972	141
	22	9901	146
	23	9830	195
	24	9759	211
	25	9841	212
	26	9923	308
	27	10005	425
	28	10646	1463
	29	11817	1721
	30	14886	1922
	31	19037	2106

	Sample Point	006		006	
	Description	WLA CBOD5 Discharge Compliance		WLA CBOD5 Discharge Compliance	
	Parameter	543		542	
	Description	WLA 7 Day Sum Of WLA Values		WLA 7 Day Sum Of CBOD5 Discharged	
	Units	lbs/day		lbs/day	
Summary Values	Monthly Avg	12588.387096774		445.419354839	
	Daily Max	19037		2106	
	Daily Max - Variable			2106	
	Daily Min	9759		134	
	Geometric Mean -				
	Week 1 Avg				
	Week 2 Avg				
	Week 3 Avg				
	Week 4 Avg				
Limit(s) in Effect	Monthly Avg				
	Daily Max				
	Daily Max - Variable			0	0
	Daily Min				
	Geometric Mean -				
	Weekly Avg				
QA/QC Information	LOD				
	LOQ				
	QC Exceedance	N		N	
	Lab Certification				

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

Laboratory Quality Control Comments

BOD Blank Depletions: 8-3 (0.50),8-4(0.57),8-5(0.53),8-6(0.28),8-7(0.32),8-8(0.29)

Submitted by K3vin1 on 09/18/2018 8:58:49 AM