

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: 09/01/2018 - 09/30/2018
 Form Due Date: 10/21/2018
 Permit Number: 0031232

Date Received:
 DOC: 405910
 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	2.910	5.980	262	128	
	2	2.471	5.590	296	172	
	3	7.711	10.818	218	216	
	4	19.961	21.826	59	56	<1.3
	5	12.502	15.414	104	120	
	6	6.730	10.339	160	92	
	7	5.345	8.366	193	76	
	8	5.304	7.214	267	108	
	9	5.922	6.836	274	228	
	10	3.294	6.277	356	244	
	11	1.736	5.979	299	204	
	12	2.080	5.738	329	236	
	13	2.901	5.499	281	204	
	14	4.353	5.169	329	192	
	15	0.600	4.847	121	140	
	16	3.093	5.179	227	200	
	17	2.076	6.143	334	224	
	18	1.690	5.926	288	204	
	19	1.686	5.633	220	176	
	20	4.449	7.166	222	148	
	21	4.568	7.059	179	160	
	22	5.422	6.408	173	152	
	23	4.513	5.992	242	160	
	24	4.061	5.719	216	220	
	25	3.051	5.829	228	208	
	26	2.923	5.779	279	176	
	27	3.104	5.306	219	140	
	28	2.384	4.960	192	92	
	29	2.868	4.732	225	180	
	30	2.812	5.076	333	296	
	31					

	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	4.417333333		7.0933		237.5		171.733333333		0	
	Daily Max	19.961		21.826		356		296		<1.3	
	Daily Max - Variable										
	Daily Min	0.6		4.732		59		56		<1.3	
	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		N		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	<2.5	22.9	<5.9	5.7	75.1
	5					
	6					
	7					
	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	0		22.9		0		5.7		75.1	
	Daily Max	<2.5		22.9		<5.9		5.7		75.1	
	Daily Max - Variable										
	Daily Min	<2.5		22.9		<5.9		5.7		75.1	
	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		5.9		2.6		11.6	
	LOQ	10		20		19.7		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	6	30	7.6		
	2	6	34	7.5		
	3	10	49	7.6		<100
	4	10.1	61.6	7.3		<100
	5	6	24	7.3		<100
	6	5	24	7.5	110	<100
	7	6	24	7.6		<100
	8	6	25	7.7		
	9	7	26	7.8		
	10	7	24	7.7		<100
	11	5	20	7.6		<100
	12	6	16	7.7	3280	<100
	13	7	16	7.5	365	<100
	14	6	17	7.7		<100
	15	7	14	7.4		
	16	6	12	7.3		
	17	7	11	7.6		<100
	18	5	14	7.6	23	<100
	19	14	18	7.6		<100
	20	7	14	7.9		<100
	21	6	13	7.4		<100
	22	5	14	7.5		
	23	5	13	7.5		
	24	6	12	7.5	10	<100
	25	5	13	7.5		<100
	26	6	17	7.6		<100
	27	4	14	7.5		<100
	28	5	16	7.6		<100
	29	5	16	7.5		
	30	7	25	7.5		
	31					

	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	6.436666667		20.886666667		7.553333333		757.6		0	
	Daily Max	14		61.6		7.9		3280		<100	
	Daily Max - Variable										
	Daily Min	4		11		7.3		10		<100	
	Geometric Mean -							124.81231712			
	Week 1 Avg	7.014285714		35.228571429							
	Week 2 Avg	6.285714286		20.571428571							
	Week 3 Avg	7.428571429		13.714285714							
	Week 4 Avg	5.142857143		14.142857143							
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	N		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	0.32				
	2	0.33	0.5			
	3	0.47	2.5			
	4	0.62	0.096	<1.3	<2.5	9.1
	5	0.33	0.5			
	6	0.17	0.6			
	7	0.14				
	8	0.28				
	9	0.22	0.5			
	10	0.22	2.2			
	11	0.23	0.5			
	12	0.20	1.1			
	13	0.26	0.8			
	14	0.26				
	15	0.25				
	16	0.19	3.2			
	17	0.20	2.6			
	18	0.32	3.3			
	19	0.24	3.2			
	20	0.26	2.8			
	21	0.16				
	22	0.19				
	23	0.17	0.2			
	24	0.18	0.7			
	25	0.26	0.2			
	26	0.20	0.2			
	27	0.24	0.2			
	28	0.26				
	29	0.25				
	30	0.42	1.3			
	31					

	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	0.261333333		1.295047619		0		0		9.1	
	Daily Max	0.62		3.3		<1.3		<2.5		9.1	
	Daily Max - Variable										
	Daily Min	0.14		0.096		<1.3		<2.5		9.1	
	Geometric Mean -										
	Week 1 Avg			0.8392							
	Week 2 Avg			1.02							
	Week 3 Avg			3.02							
	Week 4 Avg			0.3							
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	Y		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				3.070	12100
	2				3.119	11900
	3				3.107	11900
	4	<5.9	5.3	31.7	1.865	14200
	5				2.912	15100
	6				3.609	13700
	7				3.021	12700
	8				1.910	12200
	9				0.914	12100
	10				2.983	11900
	11				4.243	12000
	12				3.658	12200
	13				2.598	12000
	14				0.816	11900
	15				4.247	11900
	16				2.086	11800
	17				4.067	11700
	18				4.236	11600
	19				3.947	11400
	20				2.717	11400
	21				2.491	11300
	22				0.986	11300
	23				1.479	11200
	24				1.658	10500
	25				2.778	9880
	26				2.856	9790
	27				2.202	9930
	28				2.576	9550
	29				1.864	9440
	30				2.264	9400
	31					

	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	5.3	31.7	2.675966667	11599.666666667
	Daily Max	<5.9	5.3	31.7	4.247	15100
	Daily Max - Variable					
	Daily Min	<5.9	5.3	31.7	0.816	9400
	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	5.9	2.6	11.6		
	LOQ	19.7	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	10990	72	5568	7684	157
	2	12100	73	5568	7684	164
	3	12250	73	5568	7684	267
	4	12075	73	5568	7684	157
	5	12525	74	4810	6638	141
	6	13275	74	4810	6638	162
	7	13725	73	5568	7684	250
	8	13925	72	5568	7684	276
	9	13425	71	5568	7684	333
	10	12675	69	5568	7684	190
	11	12225	69	5568	7684	77
	12	12050	70	5568	7684	103
	13	12050	70	5568	7684	168
	14	12025	71	5568	7684	225
	15	12025	71	5568	7684	34
	16	12000	72	5568	7684	162
	17	11900	73	5568	7684	113
	18	11825	74	4810	6638	67
	19	11750	73	5568	7684	194
	20	11625	71	5568	7684	266
	21	11525	70	5568	7684	221
	22	11425	69	5568	7684	248
	23	11350	67	5568	7684	192
	24	11300	67	5568	7684	199
	25	11075	67	5568	7684	135
	26	10720	67	5568	7684	135
	27	10343	66	5568	7684	107
	28	10025	64	5568	7684	95
	29	9788	63	5568	7684	114
	30	9678	60	5568	7684	154
	31					

	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	11788.966666667		69.933333333		5492.2		7579.4		170.2	
	Daily Max	13925		74		5568		7684		333	
	Daily Max - Variable									333	
	Daily Min	9678		60		4810		6638		34	
	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	23146	2249
	2	27255	2291
	3	31364	2417
	4	34914	1504
	5	37136	1354
	6	37460	1253
	7	37460	1298
	8	37460	1417
	9	37460	1586
	10	37460	1509
	11	37460	1429
	12	38976	1397
	13	38976	1397
	14	38976	1372
	15	38976	1130
	16	38976	959
	17	38976	882
	18	38218	872
	19	38218	963
	20	38218	1061
	21	38218	1057
	22	38218	1271
	23	38218	1301
	24	38218	1387
	25	38976	1455
	26	38976	1396
	27	38976	1237
	28	38976	1111
	29	38976	977
	30	38976	393
	31		

	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	37127.1		1330.833333333	
	Daily Max	38976		2417	
	Daily Max - Variable			2417	
	Daily Min	23146		393	
	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

9-5-18(LCS of 0.827) not within 10% of 0.9 mg/L

Submitted by K3vin1 on 10/23/2018 8:45:52 AM