

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: 07/01/2018 - 07/31/2018
 Form Due Date: 08/21/2018
 Permit Number: 0031232

Date Received:
 DOC: 405908
 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	1.027	4.566	199	188	
	2	1.244	4.415	234	256	
	3	0.609	4.123	273	292	
	4	0.786	4.245	260	248	
	5	0.735	4.244	200	172	
	6	0.388	3.897	166	108	
	7	0.392	3.748	171	108	
	8	1.060	4.390	332	372	
	9	0.910	4.434	228	204	
	10	0.680	4.022	254	184	<1.3
	11	1.059	4.129	266	308	
	12	0.840	4.139	254	296	
	13	0.749	4.204	261	156	
	14	0.649	3.971	166	180	
	15	1.241	4.323	290	240	
	16	0.906	4.270	296	304	
	17	0.278	3.975	298	256	
	18	0.824	3.946	248	276	
	19	0.720	4.029	222	216	
	20	0.789	4.130	283	304	
	21	0.926	4.125	272	280	
	22	1.240	4.190	197	256	
	23	1.282	4.275	213	280	
	24	0.784	4.008	259	276	
	25	1.967	5.262	330	260	
	26	2.306	5.301	201	188	
	27	1.741	4.656	230	152	
	28	0.676	4.246	279	296	
	29	0.974	4.497	237	256	
	30	0.933	4.638	269	252	
	31	0.455	4.224	272	272	

	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	0.940967742	4.278129032	247.096774194	239.870967742	0
	Daily Max	2.306	5.301	332	372	<1.3
	Daily Max - Variable					
	Daily Min	0.278	3.748	166	108	<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	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					
	8					
	9					
	10	7.5	72.7	<4.3	3.5	131
	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	7.5	72.7	0	3.5	131
	Daily Max	7.5	72.7	<4.3	3.5	131
	Daily Max - Variable					
	Daily Min	7.5	72.7	<4.3	3.5	131
	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	3	8	7.6		
	2	3	8	7.6	25	<100
	3	3	8	7.5		<100
	4	4	6	7.5		<100
	5	4	8	7.5		<100
	6	5	5	7.3		<100
	7	5	8	7.2		
	8	5	6	7.2		
	9	4	7	7.2		<100
	10	5	8	7.0		<100
	11	5	10	7.3		<100
	12	19	12	7.5	0	<100
	13	7	9	7.3		<100
	14	5	14	7.2		
	15	5	10	7.2		
	16	5	18	7.6		<100
	17	5	25	7.8		<100
	18	6	18	7.6	65	<100
	19	6	20	7.4		<100
	20	6	39	7.1		<100
	21	5	22	7.6		
	22	6	30	7.6		
	23	7	48	7.3		<100
	24	4	24	7.2	880	<100
	25	3	29	7.5		<100
	26	4	29	7.4		<100
	27	5	21	7.0		<100
	28	5	35	7.3		
	29	4	14	7.2		
	30	6	30	7.5		<100
	31	7	24	7.2		<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	5.35483871		17.838709677		7.367741935		242.5		0	
	Daily Max	19		48		7.8		880		<100	
	Daily Max - Variable										
	Daily Min	3		5		7		0		<100	
	Geometric Mean -							34.580718245			
	Week 1 Avg	3.857142857		7.285714286							
	Week 2 Avg	7.142857143		9.428571429							
	Week 3 Avg	5.428571429		21.714285714							
	Week 4 Avg	4.857142857		30.857142857							
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	0.29	0.2			
	2	0.33	0.3			
	3	0.34	0.2			
	4	0.37	0.3			
	5	0.36	0.3			
	6	0.39				
	7	0.41				
	8	0.45	0.4			
	9	0.44	0.3			
	10	0.46	0.3	<1.3	<2.5	<6.3
	11	0.39	0.3			
	12	0.42	0.4			
	13	0.48				
	14	0.46				
	15	0.48	0.3			
	16	0.56	0.2			
	17	0.59	0.2			
	18	0.52	0.1			
	19	0.51	0.2			
	20	0.56				
	21	0.42				
	22	0.37	0.2			
	23	0.58	0.2			
	24	0.34	0.2			
	25	0.54	0.4			
	26	0.58	0.4			
	27	0.39				
	28	0.46				
	29	0.27	0.7			
	30	0.46	0.3			
	31	0.32	0.5			

	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	0.436774194		0.3		0		0		0	
	Daily Max	0.59		0.7		<1.3		<2.5		<6.3	
	Daily Max - Variable										
	Daily Min	0.27		0.1		<1.3		<2.5		<6.3	
	Geometric Mean -										
	Week 1 Avg			0.26							
	Week 2 Avg			0.34							
	Week 3 Avg			0.2							
	Week 4 Avg			0.28							
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				3.539	6320
	2				3.171	7500
	3				3.514	7980
	4				3.459	7990
	5				3.509	7340
	6				3.509	5740
	7				3.356	5140
	8				3.33	5070
	9				3.524	3710
	10	<4.3	12.0	16.6	3.342	2810
	11				3.070	2080
	12				3.299	1650
	13				3.455	1750
	14				3.322	1790
	15				3.082	1790
	16				3.364	2440
	17				3.697	2910
	18				3.122	2940
	19				3.309	2240
	20				3.341	1600
	21				3.219	1390
	22				2.950	1420
	23				2.993	1500
	24				3.224	1690
	25				3.295	2480
	26				2.995	3780
	27				2.915	3740
	28				3.570	3390
	29				3.523	4360
	30				3.705	3730
	31				3.769	2420

	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	12	16.6	3.337806452	3570.64516129
	Daily Max	<4.3	12	16.6	3.769	7990
	Daily Max - Variable					
	Daily Min	<4.3	12	16.6	2.915	1390
	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	7163	78	3569	4925	23
	2	6590	79	3569	4925	35
	3	6475	79	3569	4925	17
	4	6855	79	3569	4925	26
	5	7448	81	3569	4925	27
	6	7703	81	3569	4925	16
	7	7263	79	3569	4925	17
	8	6553	79	3569	4925	44
	9	5823	78	3569	4925	29
	10	4915	79	2737	3777	26
	11	4183	80	2737	3777	45
	12	3418	80	2382	3287	134
	13	2563	79	1869	2579	41
	14	2073	78	1667	2300	29
	15	1818	79	1584	2186	51
	16	1745	81	1485	2049	41
	17	1943	82	1521	2099	11
	18	2233	81	1667	2300	43
	19	2520	80	1869	2579	34
	20	2633	79	1869	2579	42
	21	2423	78	1758	2426	39
	22	2043	77	1830	2525	64
	23	1663	74	1514	2089	73
	24	1478	74	1398	1929	24
	25	1500	76	1398	1929	56
	26	1773	78	1584	2186	69
	27	2363	76	1960	2705	77
	28	2923	74	2191	3024	31
	29	3348	74	2413	3330	33
	30	3818	75	2701	3727	43
	31	3805	76	2701	3727	28

	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	3840.451612903	78.161290323	2417.935483871	3336.580645161	40.903225806
	Daily Max	7703	82	3569	4925	134
	Daily Max - Variable					134
	Daily Min	1478	74	1398	1929	11
	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	36977	411
	2	34978	351
	3	32979	299
	4	30980	237
	5	28981	214
	6	26982	170
	7	24983	161
	8	24983	182
	9	24983	176
	10	24151	185
	11	23319	204
	12	22132	311
	13	20432	336
	14	18530	348
	15	16545	355
	16	14461	367
	17	13245	352
	18	12175	350
	19	11662	250
	20	11662	251
	21	11753	261
	22	11999	274
	23	12028	306
	24	11905	319
	25	11636	332
	26	11351	367
	27	11442	402
	28	11875	394
	29	12746	363
	30	13933	333
	31	12535	337

	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	18978.806451613		296.709677419	
	Daily Max	36977		411	
	Daily Max - Variable			411	
	Daily Min	11351		161	
	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

7-1-18 (BOD Blank failed) 0.34

Submitted by K3vin1 on 08/20/2018 12:44:42 PM