

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: HEART OF THE VALLEY MSD WW TRTMNT FAC
 Contact Address: 801 Thilmany Rd
 Kaukauna, WI 54130
 Facility Contact: Brian Helminger, District Director
 Phone Number: (920) 766-5731
 Reporting Period: 08/01/2017 - 08/31/2017
 Form Due Date: 09/21/2017
 Permit Number: 0031232

Date Received:
 DOC: 385027
 FIN: 6375
 FID: 445005220
 Region: Northeast Region
 Permit Drafter: Richard P Sachs
 Reviewer: Mark K. Corbett
 Office: Oshkosh

	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	1.352	4.604	251	232	<1.3
	2	1.426	4.618	217	352	
	3	1.627	4.823	221	196	
	4	1.937	5.057	242	180	
	5	1.980	4.469	193	188	
	6	3.521	5.797	243	212	
	7	2.342	5.572	206	148	
	8	1.701	5.058	220	196	
	9	1.708	4.985	230	320	
	10	2.132	4.870	206	304	
	11	2.576	4.474	245	256	
	12	3.508	4.287	196	220	
	13	1.762	4.459	211	216	
	14	1.776	5.200	233	236	
	15	2.157	5.300	195	172	
	16	3.664	5.066	209	236	
	17	2.379	5.384	175	176	
	18	1.337	4.700	216	228	
	19	1.105	4.450	181	236	
	20	1.462	4.636	187	204	
	21	1.572	4.581	191	224	
	22	1.087	4.265	220	228	
	23	0.939	4.153	239	272	
	24	1.262	4.235	217	252	
	25	2.293	4.023	223	160	
	26	3.267	3.900	255	240	
	27	4.174	4.396	250	252	
	28	1.540	4.235	257	216	
	29	1.845	4.063	275	248	
	30	1.962	4.585	235	240	
	31	1.630	4.472	241	204	

	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	2.033	4.668290323	221.935483871	227.225806452	0
	Daily Max	4.174	5.797	275	352	<1.3
	Daily Max - Variable					
	Daily Min	0.939	3.9	175	148	<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	<1.3	85.8	7.1	6.7	<4.3
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
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	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	85.8	7.1	6.7	0
	Daily Max	<1.3	85.8	7.1	6.7	<4.3
	Daily Max - Variable					
	Daily Min	<1.3	85.8	7.1	6.7	<4.3
	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	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	4	14	7.3	155	
	2	3	14	7.5		<100
	3	4	14	7.6		<100
	4	3	14	7.8		<100
	5	3	12	7.4		<100
	6	4	20	7.4		<100
	7	4	24	7.5		
	8	4	16	7.5	130	
	9	5	20	7.4		<100
	10	7	22	7.4		<100
	11	5	22	7.6		<100
	12	6	22	7.8		<100
	13	6	26	7.5		<100
	14	15	45	7.5		
	15	7	30	7.5	285	
	16	9	33	7.7		<100
	17	8	33	7.5		<100
	18	3	26	7.6		<100
	19	4	29	7.6		<100
	20	5	30	8.0		<100
	21	8	33	7.6		
	22	13	34	7.4		
	23	6	36	7.4	1300	<100
	24	8	41	7.6		<100
	25	5	35	7.9		<100
	26	5	39	7.4		<100
	27	6	49	7.4		<100
	28	5	46	7.7		
	29	6	47	7.5		
	30	7	43	7.8	5	<100
	31	20	45	7.6		<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	6.387096774		29.483870968		7.561290323		375		0	
	Daily Max	20		49		8		1300		<100	
	Daily Max - Variable										
	Daily Min	3		12		7.3		5		<100	
	Geometric Mean -							130.138756731			
	Week 1 Avg	3.571428571		16							
	Week 2 Avg	6.857142857		24.714285714							
	Week 3 Avg	6.285714286		30.571428571							
	Week 4 Avg	6.857142857		40							
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	0.30	0.2	<1.3	<2.5	85.8
	2	0.35	0.2			
	3	0.29	0.2			
	4	0.28				
	5	0.33				
	6	0.40	0.5			
	7	0.33	0.2			
	8	0.31	0.3			
	9	0.34	0.2			
	10	0.37	0.3			
	11	0.31				
	12	0.35				
	13	0.58	0.4			
	14	1.02	0.5			
	15	0.81	0.2			
	16	0.88	0.3			
	17	0.64	0.2			
	18	0.50				
	19	0.61				
	20	0.27	0.3			
	21	0.78	6.5			
	22	0.77	6.8			
	23	0.78	0.2			
	24	0.88	0.2			
	25	0.85				
	26	0.82				
	27	0.95	0.4			
	28	0.85	0.5			
	29	0.87	0.2			
	30	0.90	0.5			
	31	0.70	1.6			

	Sample Point	001		001		001		001	
	Description	Effluent		Effluent		Effluent		Effluent	
	Parameter	388		789		87		133	
	Description	Phosphorus, Total		Nitrogen, Ammonia (NH3-N) Total		Cadmium, Total Recoverable		Chromium, Total Recoverable	
	Units	mg/L		mg/L		ug/L		ug/L	
Summary Values	Monthly Avg	0.594193548		0.908695652		0		0	
	Daily Max	1.02		6.8		<1.3		<2.5	
	Daily Max - Variable								
	Daily Min	0.27		0.2		<1.3		<2.5	
	Geometric Mean -								
	Week 1 Avg			0.26					
	Week 2 Avg			0.34					
	Week 3 Avg			1.5					
	Week 4 Avg			1.62					
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		0.045		1		2.5	
	LOQ	0.087		0.15		5		10	
	QC Exceedance	N		N		N		N	
	Lab Certification	445005220		445005220		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	7.1	6.7	<4.3	3.252	2340
	2				3.192	1210
	3				3.196	1300
	4				3.120	2200
	5				2.498	3290
	6				2.276	3400
	7				3.230	3840
	8				3.357	4680
	9				3.277	4720
	10				2.738	4750
	11				1.898	3760
	12				0.779	3090
	13				2.697	3120
	14				3.424	3170
	15				3.143	3080
	16				1.402	3100
	17				3.005	3250
	18				3.363	3150
	19				3.345	3130
	20				3.174	3160
	21				3.009	3110
	22				3.178	3030
	23				3.214	2990
	24				2.973	2690
	25				1.730	2120
	26				0.633	1210
	27				0.222	1370
	28				2.695	1310
	29				2.218	1260
	30				2.623	1900
	31				2.842	3450

	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	7.1	6.7	0	2.635580645	2844.516129032
	Daily Max	7.1	6.7	<4.3	3.424	4750
	Daily Max - Variable					
	Daily Min	7.1	6.7	<4.3	0.222	1210
	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	2823	79	1942	2680	42
	2	2740	79	1808	2495	38
	3	2358	78	1675	2312	60
	4	1985	76	1534	2117	47
	5	1763	73	1666	2299	48
	6	2000	72	1863	2571	126
	7	2548	73	2175	3002	88
	8	3183	73	2586	3569	56
	9	3803	75	2588	3571	70
	10	4160	74	2926	4038	128
	11	4498	74	3225	4451	106
	12	4478	73	3225	4451	174
	13	4080	72	3225	4451	95
	14	3608	74	2588	3571	218
	15	3285	74	2338	3226	131
	16	3115	76	2338	3226	270
	17	3118	76	2338	3226	161
	18	3150	77	2338	3226	38
	19	3145	75	2338	3226	38
	20	3158	74	2338	3226	66
	21	3173	75	2338	3226	100
	22	3138	75	2338	3226	115
	23	3108	75	2338	3226	44
	24	3073	74	2338	3226	83
	25	2955	72	2343	3233	88
	26	2708	72	2175	3002	127
	27	2253	71	2018	2785	205
	28	1848	70	1666	2299	70
	29	1503	69	1622	2238	97
	30	1288	69	1382	1907	115
	31	1460	71	1319	1820	277

	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	2887.258064516	73.870967742	2223.580645161	3068.451612903	107.129032258
	Daily Max	4498	79	3225	4451	277
	Daily Max - Variable					277
	Daily Min	1288	69	1319	1820	38
	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	19144	300
	2	16828	286
	3	14379	310
	4	13176	306
	5	12460	324
	6	13357	409
	7	12663	449
	8	13307	505
	9	14087	495
	10	15335	563
	11	16730	622
	12	18289	748
	13	19651	717
	14	20064	847
	15	19816	922
	16	19566	1122
	17	18978	1155
	18	18390	1087
	19	17503	951
	20	16616	922
	21	16366	804
	22	16366	788
	23	16366	562
	24	16366	484
	25	16371	534
	26	16208	623
	27	15888	762
	28	15216	732
	29	14500	714
	30	13544	785
	31	12525	979

	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	16130.806451613		671.193548387	
	Daily Max	20064		1155	
	Daily Max - Variable			1155	
	Daily Min	12460		286	
	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

Submitted by K3vin1 on 09/11/2017 11:16:02 AM