

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: 06/01/2017 - 06/30/2017
 Form Due Date: 07/21/2017
 Permit Number: 0031232

Date Received:
 DOC: 380637
 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	5.684	5.684	222	288	
	2	5.513	5.513	266	236	
	3	9.901	9.901	101	100	
	4	8.952	8.952	101	72	
	5	7.614	7.614	269	204	
	6	6.556	6.556	226	212	<1.3
	7	6.142	6.142	440	156	
	8	6.007	6.007	191	152	
	9	5.282	6.020	184	152	
	10	3.586	5.633	152	180	
	11	3.662	5.688	250	208	
	12	4.373	6.774	265	236	
	13	4.891	7.419	207	160	
	14	7.074	9.607	195	208	
	15	5.968	8.500	140	132	
	16	4.538	7.300	156	152	
	17	3.790	6.587	135	140	
	18	4.373	7.132	143	104	
	19	5.540	7.094	160	176	
	20	6.964	6.973	161	144	
	21	8.570	8.571	180	224	
	22	16.380	16.380	75	104	
	23	13.563	13.563	72	100	
	24	10.120	10.120	123	108	
	25	6.664	7.082	143	144	
	26	5.471	7.425	189	120	
	27	4.237	6.961	178	184	
	28	4.768	7.493	164	160	
	29	4.312	7.033	288	172	
	30	3.951	6.671	239	164	
	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	6.481533333	7.7465	187.166666667	163.066666667	0
	Daily Max	16.38	16.38	440	288	<1.3
	Daily Max - Variable					
	Daily Min	3.586	5.513	72	72	<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	6.9	53	<4.3	4.5	98.7
	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	6.9	53	0	4.5	98.7
	Daily Max	6.9	53	<4.3	4.5	98.7
	Daily Max - Variable					
	Daily Min	6.9	53	<4.3	4.5	98.7
	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	8	7.4		<100
	2	6	10	7.5		<100
	3	5	8	7.7		
	4	3	6	7.2		
	5	5	8	7.2		<100
	6	4	6	7.2	0	<100
	7	4	6	7.3		<100
	8	3	8	7.0		<100
	9	4	9	7.2		<100
	10	2	6	7.4		
	11	2	6	7.5		
	12	4	10	7.3		<100
	13	13	14	7.3	10	<100
	14	5	9	7.6		<100
	15	5	10	7.0		<100
	16	3	9	7.3		<100
	17	3	10	7.4		
	18	3	8	7.4		
	19	5	10	7.6		<100
	20	5	12	7.4	13	<100
	21	5	8	7.6		<100
	22	8	19	7.3		<100
	23	5	21	7.6		<100
	24	4	16	7.7		
	25	6	18	7.8		
	26	6	14	7.8		<100
	27	3	14	7.4	25	<100
	28	8	31	7.7		<100
	29	3	8	7.3		<100
	30	3	14	7.4		<100
	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	4.666666667		11.2		7.416666667		12		0	
	Daily Max	13		31		7.8		25		<100	
	Daily Max - Variable										
	Daily Min	2		6		7		0		<100	
	Geometric Mean -							7.550415303			
	Week 1 Avg	4.571428571		7.428571429							
	Week 2 Avg	4.714285714		8.857142857							
	Week 3 Avg	4.142857143		9.571428571							
	Week 4 Avg	5.714285714		19							
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	0.37	0.3			
	2	0.47				
	3	0.37				
	4	0.28	0.2			
	5	0.30	0.4			
	6	0.25	0.4	<1.3	<2.5	<6.3
	7	0.24	0.2			
	8	0.27	0.2			
	9	0.24				
	10	0.22				
	11	0.27	0.2			
	12	0.35	0.3			
	13	0.38	1.0			
	14	0.33	0.2			
	15	0.30	0.2			
	16	0.23				
	17	0.31				
	18	0.27	0.2			
	19	0.24	0.2			
	20	0.29	0.2			
	21	0.32	0.2			
	22	0.39	0.1			
	23	0.45				
	24	0.22				
	25	0.38	0.1			
	26	0.35	0.1			
	27	0.26	0.2			
	28	0.40	0.2			
	29	0.24	0.1			
	30	0.25				
	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	0.308		0.247619048		0		0		0	
	Daily Max	0.47		1		<1.3		<2.5		<6.3	
	Daily Max - Variable										
	Daily Min	0.22		0.1		<1.3		<2.5		<6.3	
	Geometric Mean -										
	Week 1 Avg			0.3							
	Week 2 Avg			0.38							
	Week 3 Avg			0.2							
	Week 4 Avg			0.14							
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		1.3		2.5		6.3	
	LOQ	0.087		0.15		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				0.00	6790
	2				0.00	6200
	3				0.00	5610
	4				0.00	5600
	5				0.00	5450
	6	<4.3	4	14.1	0.00	5250
	7				0.00	5490
	8				0.00	5130
	9				0.738	4490
	10				2.047	4710
	11				2.026	4660
	12				2.401	4620
	13				2.528	6000
	14				2.533	7730
	15				2.532	9670
	16				2.762	11900
	17				2.797	12100
	18				2.759	11900
	19				1.544	11600
	20				0.009	11100
	21				0.001	10400
	22				0.00	10800
	23				0.00	11700
	24				0.00	12000
	25				0.418	11900
	26				1.954	11600
	27				2.724	11400
	28				2.725	11900
	29				2.721	11200
	30				2.720	9460
	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	4	14.1	1.264633333	8612
	Daily Max	<4.3	4	14.1	2.797	12100
	Daily Max - Variable					
	Daily Min	<4.3	4	14.1	0	4490
	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	6758	62	5568	7684	232
	2	6778	63	5568	7684	286
	3	6638	65	5568	7684	409
	4	6343	67	5568	7684	193
	5	6050	70	5265	7266	301
	6	5715	70	5265	7266	204
	7	5478	69	5568	7684	203
	8	5448	71	5265	7266	153
	9	5330	71	5265	7266	156
	10	5090	72	5265	7266	55
	11	4955	72	3797	5240	75
	12	4748	73	3797	5240	152
	13	4620	74	3529	4870	510
	14	4998	74	3529	4870	318
	15	5753	73	5265	7266	263
	16	7005	74	4652	6420	119
	17	8825	75	5568	7684	96
	18	10350	76	5568	7684	113
	19	11393	75	5568	7684	250
	20	11875	74	5568	7684	276
	21	11675	72	5568	7684	354
	22	11250	73	5568	7684	1068
	23	10975	73	5568	7684	546
	24	11000	72	5568	7684	359
	25	11225	72	5568	7684	314
	26	11600	70	5568	7684	258
	27	11800	69	5568	7684	120
	28	11725	69	5568	7684	315
	29	11700	68	5568	7684	108
	30	11525	69	5568	7684	101
	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	8287.5	70.9	5222.866666667	7207.733333333	263.566666667
	Daily Max	11875	76	5568	7684	1068
	Daily Max - Variable					1068
	Daily Min	4620	62	3529	4870	55
	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	38976	1412
	2	38976	1501
	3	38976	1746
	4	38976	1790
	5	38673	1945
	6	38370	1795
	7	38370	1828
	8	38067	1749
	9	37764	1619
	10	37461	1265
	11	35690	1147
	12	34222	998
	13	32486	1304
	14	30447	1419
	15	30447	1529
	16	29834	1492
	17	30137	1533
	18	31908	1571
	19	33679	1669
	20	35718	1435
	21	37757	1471
	22	38060	2276
	23	38976	2703
	24	38976	2966
	25	38976	3167
	26	38976	3175
	27	38976	3019
	28	38976	2980
	29	38976	2020
	30	38976	1575
	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	36560.066666667	1869.966666667
	Daily Max	38976	3175
	Daily Max - Variable		3175
	Daily Min	29834	998
	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

TP Blank LOD Deficiencies : 6-19(-0.03)
LOD = 0.026 6-20(-0.05)

Submitted by K3vin1 on 07/07/2017 10:36:43 AM