

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: HEART OF VALLEY MSD WW TRTMNT FAC
 Contact Address: 801 Thilmany Road
 Kaukauna, WI 54130
 Facility Contact: Glen Geurts, District Director
 Phone Number: (920) 766-5731
 Reporting Period: 06/01/2016 - 06/30/2016
 Form Due Date: 07/21/2016
 Permit Number: 0031232

Date Received:
 DOC: 361559
 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	3.620	6.519	152	160	
	2	2.834	5.495	135	148	
	3	3.104	5.405	180	164	
	4	2.698	5.320	162	160	
	5	3.339	5.734	189	140	
	6	5.165	5.566	194	132	
	7	5.249	5.249	198	164	<1.0
	8	3.322	5.276	221	216	
	9	1.574	4.843	210	188	
	10	2.690	5.454	191	232	
	11	1.847	4.948	194	196	
	12	2.246	5.231	295	328	
	13	2.426	5.679	287	276	
	14	3.074	5.643	257	224	
	15	8.131	11.213	305	260	
	16	5.549	8.144	256	176	
	17	3.881	5.987	113	160	
	18	2.054	5.730	142	168	
	19	2.414	5.703	153	116	
	20	1.563	5.370	552	428	
	21	1.351	5.230	434	300	
	22	1.537	5.00	182	228	
	23	1.932	4.9	256	192	
	24	1.733	4.7	224	220	
	25	3.627	5.4	221	236	
	26	6.034	9.698	206	212	
	27	1.769	5.957	151	164	
	28	1.854	5.763	173	200	
	29	2.047	5.361	187	196	
	30	4.400	7.369	250	176	
	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	3.102133333	5.929566667	222.333333333	205.333333333	0
	Daily Max	8.131	11.213	552	428	<1
	Daily Max - Variable					
	Daily Min	1.351	4.7	113	116	<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					1
	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	8.3	60.6	2.4	4.6	116
	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	8.3	60.6	2.4	4.6	116
	Daily Max	8.3	60.6	2.4	4.6	116
	Daily Max - Variable					
	Daily Min	8.3	60.6	2.4	4.6	116
	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	1.5	3.4	1.6	1.3	5.8
	LOQ	5	10	7.5	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	2	6	7.6		<100
	2	10	8	7.5	0	<100
	3	5	10	7.7		<100
	4	3	7	7.8		
	5	2	9	7.8		
	6	3	9	7.9		<100
	7	4	7	7.8		<100
	8	4	11	7.9	40	<100
	9	12	14	7.7		<100
	10	3	8	7.9		<100
	11	5	7	7.8		
	12	3	11	7.7		
	13	4	7	7.8		<100
	14	6	12	7.5		<100
	15	7	22	7.6	15	<100
	16	4	12	7.6		<100
	17	3	16	7.7		<100
	18	4	10	7.4		
	19	5	10	7.5		
	20	6	12	7.8		<100
	21	6	14	7.8		<100
	22	6	16	7.6		<100
	23	16	24	7.7		<100
	24	5	18	7.9		<100
	25	6	19	7.8		
	26	7	28	7.9		
	27	7	28	7.7	20	<100
	28	5	21	7.8		<100
	29	4	15	7.6		<100
	30	5	13	7.5		<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	5.4		13.466666667		7.71		18.75		0	
	Daily Max	16		28		7.9		40		<100	
	Daily Max - Variable										
	Daily Min	2		6		7.4		0		<100	
	Geometric Mean							10.466351394			
	Week 1 Avg	4.142857143		8							
	Week 2 Avg	5.285714286		10							
	Week 3 Avg	5		13.714285714							
	Week 4 Avg	7.428571429		22							
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	0.26	0.7			
	2	0.31	2.3			
	3	0.37				
	4	0.33				
	5	0.30	0.9			
	6	0.35	0.6			
	7	0.38	0.9	<1.0	1.6	6.4
	8	0.55	0.6			
	9	0.41	0.9			
	10	0.31				
	11	0.40				
	12	0.38	0.8			
	13	0.32	1.2			
	14	0.33	0.9			
	15	0.48	1.1			
	16	0.19	0.4			
	17	0.23				
	18	0.31				
	19	0.23	0.6			
	20	0.36	0.7			
	21	0.34	0.9			
	22	0.34	1.2			
	23	0.41	0.8			
	24	0.37				
	25	0.39				
	26	0.54	0.6			
	27	0.41	0.6			
	28	0.39	0.6			
	29	0.26	0.6			
	30	0.34	0.3			
	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	0.353		0.827272727		0		1.6		6.4	
	Daily Max	0.55		2.3		<1		1.6		6.4	
	Daily Max - Variable										
	Daily Min	0.19		0.3		<1		1.6		6.4	
	Geometric Mean										
	Week 1 Avg			1.08							
	Week 2 Avg			0.88							
	Week 3 Avg			0.74							
	Week 4 Avg			0.76							
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	0.015		0.052		1		1.5		3.4	
	LOQ	0.051		0.172		5		5		10	
	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				2.899	5520
	2				2.661	6030
	3				2.301	6860
	4				2.622	7450
	5				2.395	7440
	6				0.401	7610
	7	<1.6	6	16.4	0.000	7560
	8				1.954	7520
	9				3.269	7210
	10				2.764	6800
	11				3.101	6880
	12				2.985	6830
	13				3.253	6840
	14				2.569	6850
	15				3.082	7010
	16				2.595	7300
	17				3.106	7030
	18				3.676	6890
	19				3.289	6900
	20				3.807	6380
	21				3.879	5650
	22				3.463	5620
	23				2.968	4540
	24				2.967	2910
	25				1.773	3260
	26				3.664	3720
	27				4.188	3560
	28				3.909	3270
	29				3.314	3450
	30				2.969	3470
	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	6	16.4	2.860766667	5945.333333333
	Daily Max	<1.6	6	16.4	4.188	7610
	Daily Max - Variable					
	Daily Min	<1.6	6	16.4	0	2910
	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	1.6	1.3	5.8		
	LOQ	7.5	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	3909	70	3354	4629	58
	2	4243	70	3797	5240	227
	3	4732	70	3797	5240	118
	4	5573	70	5265	5265	57
	5	6465	71	5265	7266	55
	6	6945	70	5265	7266	117
	7	7340	70	5265	7266	172
	8	7515	67	5568	7684	107
	9	7533	66	5568	7684	160
	10	7475	68	5568	7684	74
	11	7273	69	5265	7266	82
	12	7103	72	5265	7266	58
	13	6930	71	5565	7266	73
	14	6838	70	5265	7266	154
	15	6850	70	5268	7266	508
	16	6883	71	5265	7266	174
	17	7000	71	5265	7266	104
	18	7048	70	5265	7266	66
	19	7058	74	4652	6420	104
	20	7030	74	4652	6420	80
	21	6800	75	4652	6420	73
	22	6455	75	4652	6420	79
	23	6138	74	4652	6420	255
	24	5548	73	5265	7266	71
	25	4680	74	3529	4870	172
	26	4083	74	3529	4870	334
	27	3608	76	3061	4224	98
	28	3363	75	2701	3727	77
	29	3453	74	2701	3727	60
	30	3500	74	2701	3727	180
	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	5979.0333333333	71.6	4596.0666666667	6262.1	131.5666666667
	Daily Max	7533	76	5568	7684	508
	Daily Max - Variable					508
	Daily Min	3363	66	2701	3727	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	25053	617
	2	25213	700
	3	25373	664
	4	27001	656
	5	28629	655
	6	30097	697
	7	32008	804
	8	34222	853
	9	35993	786
	10	37764	742
	11	37764	767
	12	37764	770
	13	37764	726
	14	37764	708
	15	37461	1109
	16	37158	1123
	17	36855	1153
	18	36855	1137
	19	36242	1183
	20	35629	1190
	21	35016	1109
	22	34403	680
	23	33790	761
	24	33790	728
	25	32054	834
	26	30931	1064
	27	29340	1082
	28	27389	1086
	29	25438	1067
	30	23487	992
	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	32608.2333333333		881.4333333333	
	Daily Max	37764		1190	
	Daily Max - Variable			1190	
	Daily Min	23487		617	
	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 BLANKS Failed: 6-1 (-0.89),6-5(0.27),6-6(-0.59),6-7(-0.49)6-10(0.51),6-11(0.69),
6-24(0.95)
GGA Failed: 6-24 (230).
TP (LCS Failed):6-2 (1.0ppm failed at 0.88),6-6 (1.0ppm failed at 0.88)

Submitted by K3vin1 on 07/12/2016 1:38:53 PM