

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: 08/01/2015 - 08/31/2015
 Form Due Date: 09/21/2015
 Permit Number: 0031232

Date Received:
 DOC: 347753
 FIN: 6375
 FID: 445005220
 Region: Northeast Region
 Permit Drafter: Richard P Sachs
 Reviewer: Mark K. Corbett
 Office: Oshkosh

	Sample Point	701	001	701	701	701
	Description	Influent	Effluent	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	3.375	0.293	196	280	
	2	3.862	0.495	218	248	
	3	3.721	0.322	253	264	
	4	3.756	0.281	386	348	<1.0
	5	3.682	0.160	238	284	
	6	3.556	0.094	220	284	
	7	5.607	2.177	220	320	
	8	4.301	1.341	222	252	
	9	4.379	1.421	180	252	
	10	4.316	1.354	208	244	
	11	3.986	1.021	206	212	
	12	4.014	1.051	245	304	
	13	4.013	0.158	236	280	
	14	4.165	0.613	156	256	
	15	4.150	0.608	224	248	
	16	4.306	1.200	194	252	
	17	4.284	1.090	192	236	
	18	4.359	1.394	224	208	
	19	4.928	3.090	209	216	
	20	4.237	3.920	199	232	
	21	4.297	4.297	237	220	
	22	3.818	3.818	200		
	23	4.320	3.569	207	192	
	24	4.113	2.016	146	252	
	25	4.143	1.873	227	244	
	26	3.948	2.247	319	296	
	27	3.927	2.173	198	288	
	28	4.132	2.017	201	252	
	29	4.288	4.020	207	184	
	30	4.334	3.563	233	200	
	31	4.110	0.709	233	236	

	Sample Point	701	001	701	701	701
	Description	Influent	Effluent	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	4.142806452	1.68983871	220.451612903	252.8	0
	Daily Max	5.607	4.297	386	348	<1
	Daily Max - Variable					
	Daily Min	3.375	0.094	146	184	<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	6.1	82.3	8.6	6.2	145
	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	6.1	82.3	8.6	6.2	145
	Daily Max	6.1	82.3	8.6	6.2	145
	Daily Max - Variable					
	Daily Min	6.1	82.3	8.6	6.2	145
	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	5	17	7.5		
	2	7	15	7.4		
	3	10	19	7.6		<100
	4	12	21	7.5		<100
	5	7	23	7.7		<100
	6	8	18	7.7		<100
	7	4	17	7.8	1200	<100
	8	4	16	7.2		
	9	4	15	7.2		
	10	3	15	8.0	1000	<100
	11	6	18	7.1		<100
	12	6	17	7.7		<100
	13	3	18	7.2		<100
	14	5	23	7.7		<100
	15	5	21	7.6		
	16	5	21			
	17	3	19	7.7		<100
	18	9	24	7.7	94	<100
	19	6	19	7.7		<100
	20	7	29	7.3		<100
	21	3	24	7.8		<100
	22	3	22	7.3		
	23	8	23	7.6		
	24	4	24	7.6	8	<100
	25	8	22	7.4		<100
	26	12	24	7.6		<100
	27	4	27	7.6		<100
	28	5	31	8.1		<100
	29	4	28	7.3		
	30	6	28	7.3		
	31	4	24	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	5.806451613		21.35483871		7.55		575.5		0	
	Daily Max	12		31		8.1		1200		<100	
	Daily Max - Variable										
	Daily Min	3		15		7.1		8		<100	
	Geometric Mean							173.32043552			
	Week 1 Avg	7.571428571		18.571428571							
	Week 2 Avg	4.428571429		17.428571429							
	Week 3 Avg	5.428571429		22.428571429							
	Week 4 Avg	6.285714286		24.714285714							
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	0.42				
	2	0.29	0.3			
	3	0.40	0.7			
	4	0.44	1.0	<1.0	2.3	8.8
	5	0.45	0.2			
	6	0.50	1.3			
	7	0.52				
	8	0.31				
	9	0.47	1.3			
	10	0.35	1.1			
	11	0.34	0.4			
	12	0.52	0.5			
	13	0.48	0.1			
	14	0.52				
	15	0.69				
	16	0.69	0.1			
	17	0.51	0.2			
	18	0.62	0.4			
	19	0.45	0.1			
	20	0.59	0.1			
	21	1.36				
	22	0.53				
	23	0.54	0.2			
	24	0.53	0.3			
	25	0.61	0.2			
	26	0.58	0.2			
	27	0.36	0.3			
	28	0.67				
	29	0.35				
	30	0.80	0.2			
	31	0.52	0.3			

	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	0.529354839		0.431818182		0		2.3		8.8	
	Daily Max	1.36		1.3		<1		2.3		8.8	
	Daily Max - Variable										
	Daily Min	0.29		0.1		<1		2.3		8.8	
	Geometric Mean										
	Week 1 Avg			0.7							
	Week 2 Avg			0.68							
	Week 3 Avg			0.18							
	Week 4 Avg			0.24							
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	0.086		0.057		1		1.5		3.4	
	LOQ	0.286		0.189		5		5		10	
	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				3.082	1679
	2				3.367	1760
	3				3.399	1660
	4	1.7	9	17.9	3.475	1584
	5				3.522	1530
	6				3.462	1498
	7				3.430	1798
	8				2.960	1883
	9				2.958	1730
	10				2.962	1740
	11				2.965	1678
	12				2.963	1715
	13				3.855	1740
	14				3.552	1785
	15				3.542	1847
	16				3.106	1875
	17				3.194	1824
	18				2.965	1796
	19				1.838	2031
	20				0.317	1943
	21				0.000	1795
	22				0.000	1866
	23				0.751	1913
	24				2.097	1696
	25				2.270	1640
	26				1.701	1588
	27				1.754	1729
	28				2.115	1736
	29				0.268	1786
	30				0.771	1770
	31				3.401	1818

	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	1.7	9	17.9	2.452967742	1755.903225806
	Daily Max	1.7	9	17.9	3.855	2031
	Daily Max - Variable					
	Daily Min	1.7	9	17.9	0	1498
	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	1894	77	1534	1841	12
	2	1812	76	1534	1841	29
	3	1763	77	1534	1841	27
	4	1702	77	1417	1700	28
	5	1671	76	1417	1700	9
	6	1634	75	1417	1700	6
	7	1568	75	1417	1700	80
	8	1603	75	1417	1700	47
	9	1677	73	1459	1751	45
	10	1727	73	1459	1751	37
	11	1788	74	1534	1841	50
	12	1758	75	1534	1841	48
	13	1716	76	1417	1700	4
	14	1718	77	1417	1700	24
	15	1730	77	1417	1700	24
	16	1772	78	1488	1786	48
	17	1812	79	1488	1786	31
	18	1833	79	1488	1786	109
	19	1836	79	1488	1786	143
	20	1882	77	1534	1841	233
	21	1899	73	1666	1999	118
	22	1891	71	1666	1999	96
	23	1909	72	1666	1999	226
	24	1879	72	1666	1999	59
	25	1818	69	1854	2225	122
	26	1779	67	1854	2225	221
	27	1709	66	1622	1946	75
	28	1663	67	1622	1946	82
	29	1673	68	1622	1946	127
	30	1710	68	1622	1946	182
	31	1755	69	1854	2225	25

	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	1760.677419355	73.774193548	1552.387096774	1862.806451613	76.35483871
	Daily Max	1909	79	1854	2225	233
	Daily Max - Variable					233
	Daily Min	1568	66	1417	1700	4
	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	11544	211
	2	11320	173
	3	11187	170
	4	10937	167
	5	10687	158
	6	10437	136
	7	10270	191
	8	10153	238
	9	10078	242
	10	10003	252
	11	10120	274
	12	10237	313
	13	10237	311
	14	10237	255
	15	10237	232
	16	10266	235
	17	10295	229
	18	10249	288
	19	10203	383
	20	10320	612
	21	10569	706
	22	10818	778
	23	10996	956
	24	11174	984
	25	11540	997
	26	11906	1075
	27	11994	917
	28	11950	881
	29	11906	912
	30	11862	868
	31	12050	834

	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	10831.677419355	483.161290323
	Daily Max	12050	1075
	Daily Max - Variable		1075
	Daily Min	10003	136
	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

8-4-15 BOD Blank failed (-0.36)
8-19-15 BOD Blank failed(0.28)

Submitted by K3vin1 on 09/09/2015 10:16:15 AM