

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: 09/01/2019 - 09/30/2019
 Form Due Date: 10/21/2019
 Permit Number: 0031232

Date Received:
 DOC: 429265
 FIN: 6375
 FID: 445005220
 Region: Northeast Region
 Permit Drafter: Lisa L Lumley
 Reviewer: Roy F Van Gheem
 Office: Green Bay

	Sample Point	701	001	701	001	701
	Description	Influent	Effluent	Influent	Effluent	Influent
	Parameter	211	211	66	66	457
	Description	Flow Rate	Flow Rate	BOD5, Total	BOD5, Total	Suspended Solids, Total
	Units	MGD	MGD	mg/L	mg/L	mg/L
	Sample Type	CONTINUOUS	CONTINUOUS	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	DAILY	DAILY	5/WEEK	DAILY	5/WEEK
Sample Results	Day 1	4.035	0.752	203	8	128
	2	4.792	2.698	156	8	80
	3	5.485	2.351	196	7	216
	4	4.799	1.666	218	7	200
	5	4.722	1.458	178	8	204
	6	4.452	1.044	267	7	172
	7	4.310	0.904	263	7	224
	8	4.513	1.385	245	6	236
	9	5.890	2.826	223	8	200
	10	11.120	8.447	146	9	200
	11	21.155	18.544	35	8.5	40
	12	15.053	12.245	47	7	44
	13	13.364	10.554	89	7	116
	14	9.104	6.462	97	8	100
	15	7.874	5.312	94	7	80
	16	6.891	4.312	199	6	132
	17	6.635	3.713	175	8	212
	18	5.982	3.012	213	12	208
	19	7.839	4.806	193	8	196
	20	7.133	3.887	69	8	36
	21	6.569	3.182	92	9	56
	22	10.046	6.355	218	10	276
	23	9.054	5.482	194	9	184
	24	8.016	4.479	92	8	48
	25	7.358	3.793	197	11	240
	26	6.733	3.290	224	10	204
	27	7.505	4.903	302	8	112
	28	6.616	6.343	160	7	168
	29	7.338	7.338	172	8	180
	30	6.650	6.650	103	9	36
	31					

	Sample Point	701	001	701	001	701
	Description	Influent	Effluent	Influent	Effluent	Influent
	Parameter	211	211	66	66	457
	Description	Flow Rate	Flow Rate	BOD5, Total	BOD5, Total	Suspended Solids, Total
	Units	MGD	MGD	mg/L	mg/L	mg/L
Summary Values	Monthly Avg	7.7011	4.939766667	168.666666667	8.116666667	150.933333333
	Daily Max	21.155	18.544	302	12	276
	Daily Max - Variable					
	Daily Min	4.035	0.752	35	6	36
	Geometric Mean -					
	Geometric Mean -					
	Week 1 Avg				7.428571429	
	Week 2 Avg				7.642857143	
	Week 3 Avg				8.285714286	
	Week 4 Avg				9	
Limit(s) in Effect	Monthly Avg				30	0
	Daily Max					
	Daily Max - Variable					
	Daily Min					
	Geometric Mean -					
	Geometric Mean -					
	Weekly Avg				45	0
QA/QC Information	LOD					
	LOQ					
	QC Exceedance	N	N	Y	N	N
	Lab Certification			445005220	445005220	445005220

	Sample Point	701	701	701	701	701
	Description	Influent	Influent	Influent	Influent	Influent
	Parameter	87	133	147	264	315
	Description	Cadmium, Total Recoverable	Chromium, Total Recoverable	Copper, Total Recoverable	Lead, Total Recoverable	Nickel, 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	<1.3	7.9	57.1	<5.9	5.0
	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	87	133	147	264	315
	Description	Cadmium, Total Recoverable	Chromium, Total Recoverable	Copper, Total Recoverable	Lead, Total Recoverable	Nickel, Total Recoverable
	Units	ug/L	ug/L	ug/L	ug/L	ug/L
Summary Values	Monthly Avg	0	7.9	57.1	0	5
	Daily Max	<1.3	7.9	57.1	<5.9	5
	Daily Max - Variable					
	Daily Min	<1.3	7.9	57.1	<5.9	5
	Geometric Mean -					
	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 -					
	Geometric Mean -					
	Weekly Avg					
QA/QC Information	LOD	1.3	2.5	6.3	5.9	2.6
	LOQ	5	10	20	19.7	10
	QC Exceedance	N	N	N	N	N
	Lab Certification	405132750	405132750	405132750	405132750	405132750

	Sample Point	701	001	001	001	001
	Description	Influent	Effluent	Effluent	Effluent	Effluent
	Parameter	553	377	204	112	457
	Description	Zinc, Total Recoverable	pH Field	Fecal Coliform	Chlorine, Total Residual	Suspended Solids, Total
	Units	ug/L	su	#/100ml	ug/L	mg/L
	Sample Type	24 HR FLOW PROP	GRAB	GRAB	GRAB	24 HR FLOW PROP
	Frequency	MONTHLY	5/WEEK	WEEKLY	5/WEEK	5/WEEK
Sample Results	Day 1		7.2			23
	2		7.2		<100	20
	3		7.5	490	<100	19
	4	132	7.5		<100	19
	5		7.4		<100	21
	6		7.6		<100	23
	7		7.5			22
	8		7.3			23
	9		7.3		<100	24
	10		7.1	353	<100	19
	11		7.4	3100	<100	15.5
	12		7.2		<100	15
	13		7.4	18	<100	17
	14		7.2			18
	15		7.1			24
	16		7.7	115	<100	17
	17		7.3		<100	25
	18		7.1		<100	25
	19		7.4		<100	20
	20		7.2		<100	14
	21		7.2			24
	22		7.1			20
	23		7.5	65	<100	20
	24		7.6		<100	18
	25		7.5		<100	23
	26		7.5		<100	24
	27		7.5		<100	20
	28		7.4			24
	29		7.4			25
	30		7.3		<100	15
	31					

	Sample Point	701	001	001	001	001		
	Description	Influent	Effluent	Effluent	Effluent	Effluent		
	Parameter	553	377	204	112	457		
	Description	Zinc, Total Recoverable	pH Field	Fecal Coliform	Chlorine, Total Residual	Suspended Solids, Total		
	Units	ug/L	su	#/100ml	ug/L	mg/L		
Summary Values	Monthly Avg	132	7.3533333333	690.166666667	0	20.55		
	Daily Max	132	7.7	3100	<100	25		
	Daily Max - Variable							
	Daily Min	132	7.1	18	<100	14		
	Geometric Mean -			204.034071919				
	Geometric Mean -			115				
	Week 1 Avg				0	21		
	Week 2 Avg				0	18.785714286		
	Week 3 Avg				0	21.285714286		
	Week 4 Avg				0	21.285714286		
Limit(s) in Effect	Monthly Avg				38	0	30	0
	Daily Max		9	0		38	0	
	Daily Max - Variable							
	Daily Min		6	0				
	Geometric Mean -			400	0			
	Geometric Mean -			656	0			
	Weekly Avg					38	0	45
QA/QC Information	LOD	11.6				100		
	LOQ	40				100		
	QC Exceedance	N	N	N	N	N	N	N
	Lab Certification	405132750						445005220

	Sample Point	001	001	001	001	001
	Description	Effluent	Effluent	Effluent	Effluent	Effluent
	Parameter	457	1348	1348	1347	388
	Description	Suspended Solids, Total	WQT Credits Used (TSS)	WQT Credits Used (TSS)	WQT Computed Compliance (TSS)	Phosphorus, Total
	Units	lbs/day	lbs/day	lbs/month	lbs/day	mg/L
	Sample Type	CALCULATED	CALCULATED	CALCULATED	CALCULATED	24 HR FLOW PROP
	Frequency	5/WEEK	5/WEEK	MONTHLY	5/WEEK	5/WEEK
Sample Results	Day 1	146	0		146	0.41
	2	441	0		441	0.42
	3	369	0		369	0.38
	4	267	0		267	0.39
	5	258	0		258	0.48
	6	199	0		199	0.36
	7	169	0		169	0.34
	8	268	0		268	0.31
	9	575	0		575	0.29
	10	1324	0		1324	0.30
	11	2397	0		2397	0.27
	12	1511	0		1511	0.31
	13	1479	0		1479	0.24
	14	949	0		949	0.24
	15	1063	0		1063	0.30
	16	604	0		604	0.32
	17	780	0		780	0.37
	18	623	0		623	0.32
	19	802	0		802	0.31
	20	467	0		467	1.82
	21	626	0		626	0.34
	22	1039	0		1039	0.32
	23	896	0		896	0.31
	24	672	0		672	0.35
	25	734	0		734	0.36
	26	648	0		648	0.58
	27	801	0		801	0.25
	28	1248	0		1248	0.32
	29	1518	0		1518	0.35
	30	843	0	0	843	0.37
	31					

	Sample Point	001	001	001	001	001		
	Description	Effluent	Effluent	Effluent	Effluent	Effluent		
	Parameter	457	1348	1348	1347	388		
	Description	Suspended Solids, Total	WQT Credits Used (TSS)	WQT Credits Used (TSS)	WQT Computed Compliance (TSS)	Phosphorus, Total		
	Units	lbs/day	lbs/day	lbs/month	lbs/day	mg/L		
Summary Values	Monthly Avg	790.5333333333	0	0	790.5333333333	0.391		
	Daily Max	2397	0	0	2397	1.82		
	Daily Max - Variable							
	Daily Min	146	0	0	146	0.24		
	Geometric Mean -							
	Geometric Mean -							
	Week 1 Avg				264.142857143			
	Week 2 Avg				1214.714285714			
	Week 3 Avg				709.285714286			
	Week 4 Avg				862.571428571			
Limit(s) in Effect	Monthly Avg				801	0	1	0
	Daily Max							
	Daily Max - Variable							
	Daily Min							
	Geometric Mean -							
	Geometric Mean -							
	Weekly Avg				1345	0		
QA/QC Information	LOD						0.026	
	LOQ						0.087	
	QC Exceedance	N	N	N	N	N	N	
	Lab Certification						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	lbs/day	mg/L	ug/L	ug/L	ug/L
	Sample Type	CALCULATED	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	2.57	0.2			
	2	9.45	0.1			
	3	7.45	0.1			
	4	5.42	0.1	<1.3	<2.5	6.5
	5	5.84	0.1			
	6	3.13				
	7	2.56				
	8	3.58	0.2			
	9	6.83	0.2			
	10	21.13	0.5			
	11	41.76	0.74			
	12	31.66	0.07			
	13	21.12				
	14	12.93				
	15	13.29	0.2			
	16	11.51	0.2			
	17	11.46	0.4			
	18	8.04	0.5			
	19	12.43	0.8			
	20	59.00				
	21	9.02				
	22	16.96	0.3			
	23	14.17	0.2			
	24	13.07	0.2			
	25	11.39	0.2			
	26	15.91	0.3			
	27	10.22				
	28	16.93				
	29	21.42	0.3			
	30	20.52	0.2			
	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	lbs/day	mg/L	ug/L	ug/L	ug/L
Summary Values	Monthly Avg	14.692333333	0.277727273	0	0	6.5
	Daily Max	59	0.8	<1.3	<2.5	6.5
	Daily Max - Variable					
	Daily Min	2.56	0.07	<1.3	<2.5	6.5
	Geometric Mean -					
	Geometric Mean -					
	Week 1 Avg		0.12			
	Week 2 Avg		0.342			
	Week 3 Avg		0.42			
	Week 4 Avg		0.24			
Limit(s) in Effect	Monthly Avg		4.40	0		
	Daily Max		17	0		
	Daily Max - Variable					
	Daily Min					
	Geometric Mean -					
	Geometric Mean -					
	Weekly Avg		11	0		
QA/QC Information	LOD		0.034	1.3	2.5	6.3
	LOQ		0.113	5	10	20
	QC Exceedance	N	N	N	N	N
	Lab Certification		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				3.283	2830
	2				2.094	2840
	3				3.134	3070
	4	<5.9	5.9	18.4	3.133	2880
	5				3.264	2920
	6				3.408	2870
	7				3.406	2860
	8				3.128	2830
	9				3.064	2860
	10				2.673	4620
	11				2.611	7110
	12				2.808	10100
	13				2.810	12100
	14				2.642	12100
	15				2.562	11800
	16				2.579	11500
	17				2.922	11500
	18				2.970	11500
	19				3.033	11600
	20				3.246	11500
	21				3.387	11600
	22				3.691	11800
	23				3.572	12100
	24				3.537	13300
	25				3.565	14200
	26				3.443	13900
	27				2.602	13900
	28				0.273	13600
	29				0	13600
	30				0	13400
	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	5.9	18.4	2.761333333	9093
	Daily Max	<5.9	5.9	18.4	3.691	14200
	Daily Max - Variable					
	Daily Min	<5.9	5.9	18.4	0	2830
	Geometric Mean -					
	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 -					
	Geometric Mean -					
	Weekly Avg					
QA/QC Information	LOD	5.9	2.6	11.6		
	LOQ	19.7	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 BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance
	Parameter	399	401	544	12	843
	Description	WLA Previous 4 Day Avg River Flow	WLA Previous Day River Temp	WLA BOD5 Value	WLA Adjusted Value	WLA BOD5 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	3540	69	3053	4213	48
	2	3038	68	2761	3810	171
	3	2828	69	2455	3388	133
	4	2890	70	2160	2981	99
	5	2905	69	2455	3388	99
	6	2928	68	2455	3388	57
	7	2935	68	2455	3388	55
	8	2883	68	2455	3388	71
	9	2870	67	2455	3388	177
	10	2855	66	2455	3388	650
	11	3293	66	2761	3810	1315
	12	4355	67	3526	4866	762
	13	8608	66	5568	7684	417
	14	8608	66	5568	7684	417
	15	10478	66	5568	7684	321
	16	11650	67	5568	7684	205
	17	12000	67	5568	7684	238
	18	11725	69	5568	7684	296
	19	11575	69	5568	7684	319
	20	11525	69	5568	7684	261
	21	11525	70	5568	7684	239
	22	11550	71	5568	7684	546
	23	11625	70	5568	7684	418
	24	11750	69	5568	7684	316
	25	12200	69	5568	7684	348
	26	12850	69	5568	7684	273
	27	13375	67	5568	7684	323
	28	13825	66	5568	7684	396
	29	13900	65	5568	7684	471
	30	13750	64	5568	7684	485
	31					

	Sample Point	601	601	006	006	006
	Description	River Monitoring	River Monitoring	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance
	Parameter	399	401	544	12	843
	Description	WLA Previous 4 Day Avg River Flow	WLA Previous Day River Temp	WLA BOD5 Value	WLA Adjusted Value	WLA BOD5 Discharged
	Units	cfs	degF	lbs/day	lbs/day	lbs/day
Summary Values	Monthly Avg	8327.966666667	67.8	4389	6056.9333333333	330.866666667
	Daily Max	13900	71	5568	7684	1315
	Daily Max - Variable					1315
	Daily Min	2828	64	2160	2981	48
	Geometric Mean -					
	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 -					
	Geometric Mean -					
	Weekly Avg					
QA/QC Information	LOD					
	LOQ					
	QC Exceedance	N	N	N	N	N
	Lab Certification					

	Sample Point	006	006	112
	Description	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance	In-Plant Diversion
	Parameter	543	541	211
	Description	WLA 7 Day Sum Of WLA Values	WLA 7 Day Sum Of BOD5 Discharged	Flow Rate
	Units	lbs/day	lbs/day	MGD
	Sample Type	CALCULATED	CALCULATED	CONTINUOUS
	Frequency	DAILY	DAILY	DAILY
Sample Results	Day 1	29029	968	0
	2	27304	797	0
	3	25273	784	0
	4	22947	716	0
	5	20146	718	0
	6	18970	667	0
	7	17794	662	0
	8	17196	685	0
	9	16890	691	0
	10	16890	1208	0.385
	11	17491	2424	0
	12	24428	3970	0
	13	24428	3970	0
	14	24428	3970	0
	15	27541	4220	0
	16	30654	4248	0
	17	33767	3836	0
	18	36574	2817	0
	19	38616	2374	0
	20	38976	2057	0
	21	38976	1879	0
	22	38976	2104	0
	23	38976	2317	0
	24	38976	2395	0
	25	38976	2447	0
	26	38976	2401	0
	27	38976	2463	0
	28	38976	2620	0
	29	38976	2545	0
	30	38976	2612	0
	31			

	Sample Point	006	006	112
	Description	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance	In-Plant Diversion
	Parameter	543	541	211
	Description	WLA 7 Day Sum Of WLA Values	WLA 7 Day Sum Of BOD5 Discharged	Flow Rate
	Units	lbs/day	lbs/day	MGD
Summary Values	Monthly Avg	29970.066666667	2185.5	0.012833333
	Daily Max	38976	4248	0.385
	Daily Max - Variable		4248	
	Daily Min	16890	662	0
	Geometric Mean -			
	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 -			
	Geometric Mean -			
	Weekly Avg			
QA/QC Information	LOD			
	LOQ			
	QC Exceedance	N	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

GGA deficiencies: 9-5-19(167 ppm), 9-12-19 (154 ppm),9-19-19 (148 ppm)

Submitted by K3vin1 on 10/08/2019 7:56:23 AM