

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: 08/01/2020 - 08/31/2020
 Form Due Date: 09/21/2020
 Permit Number: 0031232

Date Received:
 DOC: 452238
 FIN: 6375
 FID: 445005220
 Region: Northeast Region
 Permit Drafter: Lisa L Lumley
 Reviewer: Barti Oumarou
 Office: Oshkosh

	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	4.609	1.012	192	11	108
	2	4.940	1.232	261	10	180
	3	4.820	1.016	254	16	216
	4	4.984	1.167	283	13	216
	5	4.669	0.950	290	14	244
	6	4.786	0.996	253	10	272
	7	4.721	1.312	335	9	260
	8	4.475	1.010	296	7	256
	9	4.669	1.268	296	9	228
	10	4.862	1.367	365	9	260
	11	4.686	1.350	341	9	256
	12	4.588	0.898	312	13	252
	13	4.645	0.797	316	6	264
	14	4.441	0.524	281	9	188
	15	4.225	0.535	317	7	208
	16	4.503	0.736	302	8	244
	17	4.375	0.506	305	9	232
	18	4.490	0.757	378	7	156
	19	4.351	0.608	381	8	308
	20	4.780	1.112	411	10	396
	21	4.615	0.851	185	9	76
	22	4.049	0.601	207	10	72
	23	4.373	1.899	295	11	64
	24	4.706	1.472	284	10	316
	25	4.675	0.827	272	12	228
	26	4.535	0.682	265	14	284
	27	4.845	1.278	261	15	252
	28	5.320	1.619	277	12	180
	29	4.746	1.040	258	9	176
	30	4.747	1.814	222	12	220
	31	4.855	1.932	273	10	232

	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	4.647903226	1.069935484	289.290322581	10.258064516	220.774193548
	Daily Max	5.32	1.932	411	16	396
	Daily Max - Variable					
	Daily Min	4.049	0.506	185	6	64
	Geometric Mean -					
	Geometric Mean -					
	Week 1 Avg				11.857142857	
	Week 2 Avg				8.857142857	
	Week 3 Avg				8.285714286	
	Week 4 Avg				12	
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	Y	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	13.6	111	<5.9	8.1
	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	13.6	111	0	8.1
	Daily Max	<1.3	13.6	111	<5.9	8.1
	Daily Max - Variable					
	Daily Min	<1.3	13.6	111	<5.9	8.1
	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	3.4	5.9	2.6
	LOQ	5	10	11.2	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		7.1			11.6
	2		7.1			8.0
	3		7.3		<100	8.4
	4	235	7.8		<100	10.8
	5		7.4		<100	14.0
	6		7.2	13	<100	11.6
	7		7.3		<100	15.2
	8		7.5			14.4
	9		7.5			12.0
	10		7.4		<100	10.0
	11		7.3		<100	10.4
	12		7.3	100	<100	13.6
	13		7.2		<100	14.4
	14		7.4		<100	10.4
	15		7.6			9.6
	16		8.1			14.8
	17		7.6		<100	12.0
	18		7.4		<100	10.4
	19		7.9		<100	12
	20		7.5	95	<100	13.6
	21		7.5		<100	8.0
	22		7.1			10.8
	23		7.2			11.2
	24		7.9		<100	8.0
	25		7.3		<100	10.0
	26		7.3		<100	14.4
	27		7.5	50	<100	11.6
	28		7.5		<100	14.4
	29		7.5			10.8
	30		7.5			8.4
	31		7.5		<100	9.2

	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	235	7.441935484	64.5	0	11.419354839		
	Daily Max	235	8.1	100	<100	15.2		
	Daily Max - Variable							
	Daily Min	235	7.1	13	<100	8		
	Geometric Mean -			49.849320236				
	Geometric Mean -			100				
	Week 1 Avg				0	11.371428571		
	Week 2 Avg				0	12.171428571		
	Week 3 Avg				0	11.485714286		
	Week 4 Avg				0	11.485714286		
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	1347	388	388
	Description	Suspended Solids, Total	WQT Credits Used (TSS)	WQT Computed Compliance (TSS)	Phosphorus, Total	Phosphorus, Total
	Units	lbs/day	lbs/month	lbs/day	mg/L	lbs/day
	Sample Type	CALCULATED	CALCULATED	CALCULATED	24 HR FLOW PROP	CALCULATED
	Frequency	5/WEEK	MONTHLY	5/WEEK	5/WEEK	5/WEEK
Sample Results	Day 1	98	0	98	0.27	2.28
	2	82	0	82	0.29	2.98
	3	71	0	71	0.33	2.80
	4	105	0	105	0.28	2.73
	5	111	0	111	0.32	2.54
	6	96	0	96	0.26	2.16
	7	166	0	166	0.26	2.84
	8	121	0	121	0.30	2.53
	9	127	0	127	0.26	2.75
	10	114	0	114	0.28	3.19
	11	117	0	117	0.29	3.27
	12	102	0	102	0.31	2.32
	13	96	0	96	0.20	1.33
	14	45	0	45	0.42	1.84
	15	43	0	43	0.29	1.29
	16	91	0	91	0.31	1.90
	17	51	0	51	0.35	1.48
	18	66	0	66	0.32	2.02
	19	61	0	61	0.28	1.42
	20	126	0	126	0.33	3.06
	21	57	0	57	0.22	1.56
	22	54	0	54	0.24	1.20
	23	177	0	177	0.24	3.80
	24	98	0	98	0.24	2.95
	25	69	0	69	0.24	1.66
	26	82	0	82	0.31	1.76
	27	124	0	124	0.32	3.41
	28	194	0	194	0.47	6.35
	29	94	0	94	0.28	2.43
	30	127	0	127	0.29	4.39
	31	148	0	148	0.24	3.87

	Sample Point	001	001	001	001	001	
	Description	Effluent	Effluent	Effluent	Effluent	Effluent	
	Parameter	457	1348	1347	388	388	
	Description	Suspended Solids, Total	WQT Credits Used (TSS)	WQT Computed Compliance (TSS)	Phosphorus, Total	Phosphorus, Total	
	Units	lbs/day	lbs/month	lbs/day	mg/L	lbs/day	
Summary Values	Monthly Avg	100.419354839	0	100.419354839	0.291612903	2.584193548	
	Daily Max	194	0	194	0.47	6.35	
	Daily Max - Variable						
	Daily Min	43	0	43	0.2	1.2	
	Geometric Mean -						
	Geometric Mean -						
	Week 1 Avg			104.142857143			
	Week 2 Avg			103.142857143			
	Week 3 Avg			70.714285714			
	Week 4 Avg			114			
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	789	87	133	147	264
	Description	Nitrogen, Ammonia (NH3-N) Total	Cadmium, Total Recoverable	Chromium, Total Recoverable	Copper, Total Recoverable	Lead, Total Recoverable
	Units	mg/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	5/WEEK	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1					
	2	0.9				
	3	1.1				
	4	1.0	<1.3	<2.5	3.6	<5.9
	5	0.8				
	6	0.5				
	7					
	8					
	9	0.3				
	10	0.3				
	11	0.5				
	12	1.4				
	13	0.5				
	14					
	15					
	16	0.2				
	17	0.2				
	18	0.2				
	19	0.2				
	20	0.5				
	21					
	22					
	23	0.2				
	24	0.3				
	25	0.4				
	26	0.9				
	27	0.8				
	28					
	29					
	30	0.2				
	31	0.2				

	Sample Point	001	001	001	001	001
	Description	Effluent	Effluent	Effluent	Effluent	Effluent
	Parameter	789	87	133	147	264
	Description	Nitrogen, Ammonia (NH3-N) Total	Cadmium, Total Recoverable	Chromium, Total Recoverable	Copper, Total Recoverable	Lead, Total Recoverable
	Units	mg/L	ug/L	ug/L	ug/L	ug/L
Summary Values	Monthly Avg	0.527272727	0	0	3.6	0
	Daily Max	1.4	<1.3	<2.5	3.6	<5.9
	Daily Max - Variable					
	Daily Min	0.2	<1.3	<2.5	3.6	<5.9
	Geometric Mean -					
	Geometric Mean -					
	Week 1 Avg	0.86				
	Week 2 Avg	0.6				
	Week 3 Avg	0.26				
	Week 4 Avg	0.52				
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	3.4	5.9
	LOQ	0.113	5	10	11.2	19.7
	QC Exceedance	N	N	N	N	N
	Lab Certification	445005220	405132750	405132750	405132750	405132750

	Sample Point	001	001	101	601	601
	Description	Effluent	Effluent	Effluent Reuse	River Monitoring	River Monitoring
	Parameter	315	553	671	400	399
	Description	Nickel, Total Recoverable	Zinc, Total Recoverable	Flow Unregulated	WLA Previous Day River Flow	WLA Previous 4 Day Avg River Flow
	Units	ug/L	ug/L	MGD	cfs	cfs
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	CONTINUOUS	GAUGE STN	CALCULATED
	Frequency	MONTHLY	MONTHLY	DAILY	DAILY	DAILY
Sample Results	Day 1			3.597	6130	5418
	2			3.708	6070	5738
	3			3.804	6510	6003
	4	6.5	15.0	3.817	6960	6210
	5			3.719	6440	6418
	6			3.790	5400	6495
	7			3.409	3890	6328
	8			3.465	3310	5673
	9			3.401	3300	4760
	10			3.495	3580	3975
	11			3.336	3480	3520
	12			3.690	3470	3418
	13			3.848	3670	3568
	14			3.917	3670	3568
	15			3.690	3670	3568
	16			3.767	3640	3615
	17			3.869	4380	3658
	18			3.733	4550	3835
	19			3.743	4040	4060
	20			3.668	3640	4153
	21			3.764	2750	4153
	22			3.448	2380	3745
	23			2.474	2370	3203
	24			3.234	2360	2785
	25			3.848	3390	2465
	26			3.853	3820	2625
	27			3.567	4550	2985
	28			3.701	5530	3530
	29			3.706	5870	4323
	30			2.933	5870	4943
	31			2.923	5920	5455

	Sample Point	001	001	101	601	601
	Description	Effluent	Effluent	Effluent Reuse	River Monitoring	River Monitoring
	Parameter	315	553	671	400	399
	Description	Nickel, Total Recoverable	Zinc, Total Recoverable	Flow Unregulated	WLA Previous Day River Flow	WLA Previous 4 Day Avg River Flow
	Units	ug/L	ug/L	MGD	cfs	cfs
Summary Values	Monthly Avg	6.5	15	3.577967742	4342.258064516	4328.806451613
	Daily Max	6.5	15	3.917	6960	6495
	Daily Max - Variable					
	Daily Min	6.5	15	2.474	2360	2465
	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	2.6	11.6			
	LOQ	10	40			
	QC Exceedance	N	N	N	N	N
	Lab Certification	405132750	405132750			

	Sample Point	601	006	006	006	006
	Description	River Monitoring	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance
	Parameter	401	544	12	843	543
	Description	WLA Previous Day River Temp	WLA BOD5 Value	WLA Adjusted Value	WLA BOD5 Discharged	WLA 7 Day Sum Of WLA Values
	Units	degF	lbs/day	lbs/day	lbs/day	lbs/day
	Sample Type	CALCULATED	SEE TABLE	CALCULATED	CALCULATED	CALCULATED
	Frequency	DAILY	DAILY	DAILY	DAILY	DAILY
Sample Results	Day 1	79	3343	4613	90	20597
	2	80	3343	4613	99	20371
	3	80	3343	4613	136	20977
	4	75	3854	5319	130	22094
	5	73	3854	5319	114	23211
	6	74	3854	5319	82	24328
	7	75	3854	5319	94	25445
	8	75	3854	5319	59	25956
	9	75	2926	4038	99	25539
	10	76	2588	3571	103	24784
	11	76	2588	3571	106	23518
	12	76	2338	3226	100	22002
	13	78	2318	3199	31	17684
	14	78	2318	3199	31	17684
	15	78	2318	3199	31	17684
	16	78	2318	3199	51	17076
	17	77	2588	3571	37	17076
	18	77	2588	3571	47	17076
	19	76	2926	4038	42	17664
	20	76	2926	4038	92	18252
	21	76	2926	4038	61	18590
	22	76	2588	3571	48	18860
	23	76	2338	3226	179	18880
	24	77	1942	2680	123	18234
	25	79	1675	2312	80	17321
	26	79	1808	2495	80	16203
	27	78	1942	2680	156	15219
	28	78	2318	3199	157	14611
	29	77	2926	4038	81	14949
	30	76	2926	4038	177	15537
	31	75	3854	5319	155	17449

	Sample Point	601	006	006	006	006
	Description	River Monitoring	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance	WLA BOD5 Discharge Compliance
	Parameter	401	544	12	843	543
	Description	WLA Previous Day River Temp	WLA BOD5 Value	WLA Adjusted Value	WLA BOD5 Discharged	WLA 7 Day Sum Of WLA Values
	Units	degF	lbs/day	lbs/day	lbs/day	lbs/day
Summary Values	Monthly Avg	76.741935484	2815.548387097	3885.483870968	92.612903226	19511.967741935
	Daily Max	80	3854	5319	179	25956
	Daily Max - Variable				179	
	Daily Min	73	1675	2312	31	14611
	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	112
	Description	WLA BOD5 Discharge Compliance	In-Plant Diversion
	Parameter	541	211
	Description	WLA 7 Day Sum Of BOD5 Discharged	Flow Rate
	Units	lbs/day	MGD
	Sample Type	CALCULATED	CONTINUOUS
	Frequency	DAILY	DAILY
Sample Results	Day 1	985	0
	2	821	0
	3	793	0
	4	785	0
	5	770	0
	6	777	0
	7	746	0
	8	805	0
	9	714	0
	10	682	0
	11	658	0
	12	645	0
	13	519	0
	14	519	0
	15	519	0
	16	471	0
	17	405	0
	18	345	0
	19	286	0
	20	337	0
	21	360	0
	22	378	0
	23	506	0
	24	591	0
	25	624	0
	26	663	0
	27	727	0
	28	822	0
	29	855	0
	30	853	0
	31	886	0

	Sample Point	006	112
	Description	WLA BOD5 Discharge Compliance	In-Plant Diversion
	Parameter	541	211
	Description	WLA 7 Day Sum Of BOD5 Discharged	Flow Rate
	Units	lbs/day	MGD
Summary Values	Monthly Avg	640.225806452	0
	Daily Max	985	0
	Daily Max - Variable	985	
	Daily Min	286	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
	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 GGA Failures: 8/6 (241),8/13 (320)
BOD Blank Exceedences: 8/20 (0.29) 8/29 (0.34)

Submitted by K3vin1 on 09/21/2020 12:33:43 PM