

Wastewater Discharge Monitoring Long Report

For DNR Use Only

Facility Name: HEART OF THE VALLEY METRO SEWERAGE DISTRICT
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 Kaukauna, WI 54130
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 Phone Number: 920-766-5731
 Reporting Period: 07/01/2020 - 07/31/2020
 Form Due Date: 08/21/2020
 Permit Number: 0031232

Date Received:
 DOC: 452237
 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	6.172	2.191	247	8	224
	2	5.720	2.157	309	7	288
	3	5.102	1.352	212	8	208
	4	4.755	0.931	357	7	180
	5	5.278	1.442	290	9	204
	6	5.417	1.776	222	11	132
	7	5.333	1.685	255	8	272
	8	5.258	1.654	286	17	244
	9	7.852	4.510	253	13	184
	10	11.388	8.391	79	14	32
	11	7.459	3.916	83	7	20
	12	6.682	3.138	210	9	164
	13	6.283	2.665	247	11	208
	14	6.164	2.528	221	12	192
	15	6.928	3.284	201	9	160
	16	6.422	2.782	195	11	144
	17	6.072	2.466	230	9	132
	18	5.773	2.293	362	11	120
	19	6.327	2.778	176	8	160
	20	5.900	2.358	199	11	248
	21	5.611	2.068	209	11	160
	22	5.498	1.911	241	15	224
	23	5.462	1.869	263	9	248
	24	5.331	1.740	517	13	204
	25	4.956	1.324	240	14	136
	26	5.361	2.389	223	13	260
	27	5.167	1.469	266	13	220
	28	5.319	1.343	267	12	260
	29	5.179	1.280	332	12	240
	30	5.036	1.161	182	8	196
	31	4.806	1.143	220	13	68

	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	5.93583871		2.322387097		244.967741935		10.741935484		184.903225806	
	Daily Max	11.388		8.391		517		17		288	
	Daily Max - Variable										
	Daily Min	4.755		0.931		79		7		20	
	Geometric Mean -										
	Geometric Mean -										
	Week 1 Avg							8.285714286			
	Week 2 Avg							11.857142857			
	Week 3 Avg							10			
	Week 4 Avg							12.714285714			
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					
	5					
	6					
	7	<1.3	9.0	78.3	<5.9	7.5
	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		9		78.3		0		7.5	
	Daily Max	<1.3		9		78.3		<5.9		7.5	
	Daily Max - Variable										
	Daily Min	<1.3		9		78.3		<5.9		7.5	
	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		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		7.4	8	<100	7.6
	2		7.3		<100	6.0
	3		7.3		<100	8.4
	4		7.5			8.4
	5		7.5			8.8
	6		8.0		<100	11.2
	7	166	7.3		<100	6.4
	8		7.2	0	<100	11.6
	9		7.8		<100	8.8
	10		7.3		<100	16.8
	11		7.1			9.2
	12		7.2			8.4
	13		7.6		<100	12.8
	14		7.5		<100	10.4
	15		7.4	30	<100	10.4
	16		7.7		<100	7.2
	17		7.0		<100	12.0
	18		7.5			11.6
	19		7.5			9.2
	20		7.5		<100	16.6
	21		7.5		<100	6.8
	22		7.1		<100	11.2
	23		7.2	10	<100	11.2
	24		7.4		<100	13.2
	25		6.2			12.4
	26		7.1			13.2
	27		7.5		<100	8.4
	28		7.3		<100	12.8
	29		7.5		<100	12.8
	30		7.4		<100	11.6
	31		7.2		<100	13.6

	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	166		7.35483871		12		0		10.612903226	
	Daily Max	166		8		30		<100		16.8	
	Daily Max - Variable										
	Daily Min	166		6.2		0		<100		6	
	Geometric Mean -					6.999271023					
	Geometric Mean -					1					
	Week 1 Avg							0		8.114285714	
	Week 2 Avg							0		11.142857143	
	Week 3 Avg							0		10.542857143	
	Week 4 Avg							0		11.771428571	
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	0
QA/QC Information	LOD	11.6						100			
	LOQ	40						100			
	QC Exceedance	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	139	0	139	0.22	4.02
	2	108	0	108	0.24	4.32
	3	95	0	95	0.31	3.50
	4	65	0	65	0.28	2.17
	5	106	0	106	0.35	4.21
	6	166	0	166	0.25	3.70
	7	90	0	90	0.27	3.79
	8	160	0	160	0.33	4.55
	9	331	0	331	0.32	12.04
	10	1176	0	1176	0.36	25.19
	11	300	0	300	0.22	7.19
	12	220	0	220	0.27	7.07
	13	284	0	284	0.28	6.22
	14	219	0	219	0.25	5.27
	15	285	0	285	0.29	7.94
	16	167	0	167	0.25	5.80
	17	247	0	247	0.28	5.76
	18	222	0	222	0.27	5.16
	19	213	0	213	0.26	6.02
	20	315	0	315	0.34	6.69
	21	117	0	117	0.26	4.48
	22	179	0	179	0.29	4.62
	23	175	0	175	0.56	8.73
	24	192	0	192	0.26	3.77
	25	137	0	137	0.27	2.98
	26	263	0	263	0.37	7.37
	27	103	0	103	0.37	4.53
	28	143	0	143	0.31	3.47
	29	137	0	137	0.29	3.10
	30	112	0	112	0.38	3.68
	31	130	0	130	0.23	2.19

	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	212.774193548		0		212.774193548		0.297741935		5.791290323	
	Daily Max	1176		0		1176		0.56		25.19	
	Daily Max - Variable										
	Daily Min	65		0		65		0.22		2.17	
	Geometric Mean -										
	Geometric Mean -										
	Week 1 Avg					109.857142857					
	Week 2 Avg					384.285714286					
	Week 3 Avg					223.714285714					
	Week 4 Avg					170.285714286					
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	
	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	0.6				
	2	0.4				
	3					
	4					
	5	0.4				
	6	0.8				
	7	1.1	<1.3	<2.5	5.6	<5.9
	8	1.5				
	9	1.4				
	10					
	11					
	12	0.2				
	13	0.8				
	14	0.3				
	15	0.7				
	16	0.7				
	17					
	18					
	19	1.0				
	20	0.9				
	21	1.2				
	22	1.2				
	23	0.7				
	24					
	25					
	26	0.9				
	27	0.8				
	28	0.8				
	29	1.2				
	30	0.5				
	31					

	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	0.822727273		0		0		5.6		0	
	Daily Max	1.5		<1.3		<2.5		5.6		<5.9	
	Daily Max - Variable										
	Daily Min	0.2		<1.3		<2.5		5.6		<5.9	
	Geometric Mean -										
	Geometric Mean -										
	Week 1 Avg	0.66									
	Week 2 Avg	0.84									
	Week 3 Avg	0.9									
	Week 4 Avg	0.88									
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			3.981	8040	10425
	2			3.563	6710	9660
	3			3.750	6820	8588
	4			3.824	6840	7743
	5			3.836	6830	7103
	6			3.641	7500	6800
	7	7.5	18.9	3.648	8570	6998
	8			3.604	9130	7435
	9			3.342	8580	8008
	10			2.997	10000	8445
	11			3.543	9980	9070
	12			3.544	9590	8423
	13			3.618	9150	9550
	14			3.636	9150	9550
	15			3.644	9150	9550
	16			3.640	9190	9343
	17			3.606	9280	9243
	18			3.480	9310	9258
	19			3.549	9360	9233
	20			3.542	7880	9285
	21			3.543	7160	8958
	22			3.587	6410	8428
	23			3.593	5180	7703
	24			3.591	4670	6658
	25			3.632	4710	5855
	26			2.972	4790	5243
	27			3.698	4810	4838
	28			3.976	4850	4745
	29			3.899	5010	4790
	30			3.875	5680	4865
	31			3.663	6130	5088

	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	7.5		18.9		3.613451613		7434.193548387		7770.35483871	
	Daily Max	7.5		18.9		3.981		10000		10425	
	Daily Max - Variable										
	Daily Min	7.5		18.9		2.972		4670		4745	
	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	78	3667	5060	142	36772
	2	81	3667	5060	118	35174
	3	82	3667	5060	87	33273
	4	82	3081	4252	51	30786
	5	82	3081	4252	114	28299
	6	84	3081	4252	163	25812
	7	84	3081	4252	107	23325
	8	84	3081	4252	232	22739
	9	84	3667	5060	478	22739
	10	83	3667	5060	966	22739
	11	81	4374	6036	237	24032
	12	81	4374	6036	227	25325
	13	79	4374	6036	255	29204
	14	79	4374	6036	255	29204
	15	79	4374	6036	255	29204
	16	77	5182	7151	244	30719
	17	77	5182	7151	184	32234
	18	78	4374	6036	201	32234
	19	79	4374	6036	189	32234
	20	80	4374	6036	210	32234
	21	79	4374	6036	191	32234
	22	78	4374	6036	231	32234
	23	77	4124	5691	148	31176
	24	77	4124	5691	192	30118
	25	78	3569	4925	151	29313
	26	80	3569	4925	263	28508
	27	80	2737	3777	164	26871
	28	80	2737	3777	138	25234
	29	79	2737	3777	129	23597
	30	79	2737	3777	75	22210
	31	79	2737	3777	126	20823

	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	80	3771.451612903	5204.483870968	210.419354839	28406.451612903
	Daily Max	84	5182	7151	966	36772
	Daily Max - Variable				966	
	Daily Min	77	2737	3777	51	20823
	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	1047	0
	2	990	0
	3	923	0
	4	856	0
	5	833	0
	6	838	0
	7	781	0
	8	871	0
	9	1231	0
	10	2110	0
	11	2296	0
	12	2409	0
	13	2645	0
	14	2645	0
	15	2645	0
	16	2411	0
	17	1629	0
	18	1593	0
	19	1555	0
	20	1532	0
	21	1475	0
	22	1451	0
	23	1355	0
	24	1362	0
	25	1313	0
	26	1387	0
	27	1340	0
	28	1287	0
	29	1185	0
	30	1111	0
	31	1046	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	1488.774193548		0	
	Daily Max	2645		0	
	Daily Max - Variable	2645			
	Daily Min	781		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

GGA Exceedances: 7-9(231 mg/L), 7-30 (263 mg/L)

Submitted by K3vin1 on 08/21/2020 1:31:51 PM