

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: 08/01/2021 - 08/31/2021
 Form Due Date: 09/21/2021
 Permit Number: 0031232

Date Received:
 DOC: 473444
 FIN: 6375
 FID: 445005220
 Region: Northeast Region
 Permit Drafter: Lisa L Lumley
 Reviewer: Barti Oumarou
 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	6.807	3.713	228	168	
	2	6.476	3.021	261	144	
	3	5.977	2.461	265	196	<1.3
	4	6.011	2.401	304	164	
	5	6.054	2.648	334	196	
	6	5.879	2.209	207	192	
	7	7.546	4.348	273	212	
	8	10.657	7.528	185	160	
	9	11.396	8.164	123	128	
	10	9.931	6.751	182	140	
	11	9.099	5.951	198	148	
	12	8.458	5.619	179	168	
	13	7.898	4.083	224	116	
	14	7.215	4.962	215	156	
	15	7.742	5.093	203	176	
	16	6.971	3.577	213	156	
	17	7.288	4.112	227	220	
	18	7.050	3.657	265	188	
	19	6.862	6.384	300	164	
	20	6.825	3.479	249	128	
	21	6.356	2.789	243	116	
	22	6.820	3.669	266	192	
	23	6.647	3.209	247	192	
	24	7.972	4.688	222	224	
	25	7.438	3.795	249	204	
	26	8.230	4.965	257	188	
	27	14.880	11.418	161	196	
	28	16.658	13.111	220	92	
	29	13.022	9.615	106	140	
	30	11.078	7.464	201	164	
	31	9.175	6.003	219	208	

	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	8.400580645	5.189903226	226.64516129	168.903225806	0
	Daily Max	16.658	13.111	334	224	<1.3
	Daily Max - Variable					
	Daily Min	5.879	2.209	106	92	<1.3
	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
	LOQ					5
	QC Exceedance	N	N	Y	N	N
	Lab Certification			445005220	445005220	405132750

	Sample Point	001	701	701	701	701
	Description	Effluent	Influent	Influent	Influent	Influent
	Parameter	66	133	147	264	315
	Description	BOD5, Total	Chromium, Total Recoverable	Copper, Total Recoverable	Lead, Total Recoverable	Nickel, 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	DAILY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	12				
	2	13				
	3	13	10.2	62.4	<5.9	7.4
	4	15				
	5	14				
	6	17				
	7	12				
	8	12				
	9	14				
	10	10				
	11	10				
	12	13				
	13	12				
	14	10				
	15	14				
	16	11				
	17	12				
	18	10				
	19	12				
	20	10				
	21	10				
	22	14				
	23	15				
	24	10				
	25	12				
	26	13				
	27	13				
	28	9				
	29	8				
	30	12				
	31	8				

	Sample Point	001		701		701		701		701	
	Description	Effluent		Influent		Influent		Influent		Influent	
	Parameter	66		133		147		264		315	
	Description	BOD5, Total		Chromium, Total Recoverable		Copper, Total Recoverable		Lead, Total Recoverable		Nickel, Total Recoverable	
	Units	mg/L		ug/L		ug/L		ug/L		ug/L	
Summary Values	Monthly Avg	11.935483871		10.2		62.4		0		7.4	
	Daily Max	17		10.2		62.4		<5.9		7.4	
	Daily Max - Variable										
	Daily Min	8		10.2		62.4		<5.9		7.4	
	Geometric Mean -										
	Geometric Mean -										
	Week 1 Avg	13.714285714									
	Week 2 Avg	11.571428571									
	Week 3 Avg	11.285714286									
	Week 4 Avg	12.285714286									
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			2.5		3.4		5.9		2.6	
	LOQ			10.5		10		20		10	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	445005220		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			12.8
	2		7.5	50	<100	22.8
	3	137	7.3		<100	13.2
	4		7.4		<100	7.2
	5		7.3		<100	14.8
	6		7.4		<100	13.6
	7		8.0			12.4
	8		7.8			12.0
	9		7.4		<100	24.8
	10		7.1	10	<100	11.6
	11		7.6		<100	9.6
	12		7.6		<100	9.6
	13		7.4		<100	11.6
	14		7.6			11.2
	15		7.3			13.6
	16		7.4	83	<100	12.8
	17		7.3		<100	13.2
	18		7.2		<100	11.2
	19		7.4		<100	12.8
	20		7.4		<100	12.8
	21		7.6			14.8
	22		7.2			14.4
	23		7.5	565	<100	19.2
	24		7.5		<100	15.2
	25		7.6		<100	13.6
	26		7.1		<100	18.4
	27		7.3		<100	12.0
	28		7.9		<100	15.6
	29		7.6		<100	12.4
	30		7.3			11.2
	31		7.6			11.6

	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	137		7.441935484		177		0		13.612903226	
	Daily Max	137		8		565		<100		24.8	
	Daily Max - Variable										
	Daily Min	137		7.1		10		<100		7.2	
	Geometric Mean -					69.586362659					
	Geometric Mean -					10					
	Week 1 Avg							0		13.828571429	
	Week 2 Avg							0		12.914285714	
	Week 3 Avg							0		13.028571429	
	Week 4 Avg							0		15.485714286	
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	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	396	0	396	0.31	9.60
	2	574	0	574	0.33	8.31
	3	271	0	271	0.44	9.03
	4	144	0	144	0.45	9.01
	5	327	0	327	0.34	7.51
	6	251	0	251	0.31	5.71
	7	450	0	450	0.27	9.79
	8	753	0	753	0.25	15.70
	9	1689	0	1689	0.26	17.70
	10	653	0	653	0.24	13.51
	11	476	0	476	0.25	12.41
	12	450	0	450	0.27	12.65
	13	395	0	395	0.27	9.19
	14	463	0	463	0.27	11.17
	15	578	0	578	0.27	11.47
	16	382	0	382	0.28	8.35
	17	453	0	453	0.22	7.54
	18	342	0	342	0.26	7.93
	19	393	0	393	0.33	10.14
	20	371	0	371	0.29	8.41
	21	344	0	344	0.43	10.00
	22	441	0	441	0.34	10.40
	23	514	0	514	0.40	10.71
	24	594	0	594	0.53	20.72
	25	430	0	430	0.34	10.76
	26	762	0	762	0.35	14.49
	27	1143	0	1143	0.34	32.38
	28	1706	0	1706	0.23	25.15
	29	994	0	994	0.26	20.85
	30	697	0	697	0.27	16.81
	31	581	0	581	0.29	14.52

	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	581.193548387		0		581.193548387		0.312580645		12.642580645	
	Daily Max	1706		0		1706		0.53		32.38	
	Daily Max - Variable										
	Daily Min	144		0		144		0.22		5.71	
	Geometric Mean -										
	Geometric Mean -										
	Week 1 Avg					344.714285714					
	Week 2 Avg					697					
	Week 3 Avg					409					
	Week 4 Avg					798.571428571					
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	
	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	0.4				
	2	0.5				
	3	0.8	<1.3	<2.5	5.9	<5.9
	4	0.7				
	5	0.4				
	6					
	7					
	8	0.3				
	9	0.4				
	10	0.4				
	11	0.5				
	12	0.5				
	13					
	14					
	15	0.6				
	16	0.2				
	17	0.3				
	18	0.2				
	19	0.2				
	20					
	21					
	22	0.5				
	23	0.6				
	24	0.6				
	25	0.3				
	26	0.4				
	27					
	28					
	29	0.1				
	30	0.6				
	31	0.4				

	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	0.430434783		0		0		5.9		0	
	Daily Max	0.8		<1.3		<2.5		5.9		<5.9	
	Daily Max - Variable										
	Daily Min	0.1		<1.3		<2.5		5.9		<5.9	
	Geometric Mean -										
	Geometric Mean -										
	Week 1 Avg	0.56									
	Week 2 Avg	0.42									
	Week 3 Avg	0.3									
	Week 4 Avg	0.48									
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	0.027		1.3		2.5		3.4		5.9	
	LOQ	0.09		5		10		10		20	
	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			3.094	5970	7705
	2			3.455	4650	7090
	3	7.0	15.2	3.516	1940	6200
	4			3.610	2240	4870
	5			3.406	2240	3700
	6			3.670	2170	2768
	7			3.198	2160	2148
	8			3.129	2710	2203
	9			3.232	4230	2320
	10			3.181	5590	2818
	11			3.148	6810	3673
	12			2.839	7960	4835
	13			3.815	8220	6148
	14			2.253	8180	7145
	15			2.649	8210	7793
	16			3.394	5610	8143
	17			3.176	9410	8305
	18			3.393	8950	8603
	19			3.178	8490	8795
	20			3.346	8450	8865
	21			3.567	8420	8825
	22			3.151	8200	8578
	23			3.438	8340	8390
	24			3.284	8020	8353
	25			3.643	7930	8245
	26			3.265	7740	8123
	27			3.462	8450	8008
	28			3.547	9190	8035
	29			3.407	9370	8328
	30			3.614	9450	8688
	31			3.172	9590	9115

	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	15.2	3.297806452	6738.387096774	6671.451612903
	Daily Max	7	15.2	3.815	9590	9115
	Daily Max - Variable					
	Daily Min	7	15.2	2.253	1940	2148
	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	77	3854	5319	384	31714
	2	76	3854	5319	335	30386
	3	76	3854	5319	271	29866
	4	76	2926	4038	296	28418
	5	77	2588	3571	314	26632
	6	77	1995	2753	319	24253
	7	77	1681	2320	428	20752
	8	76	1681	2320	772	18579
	9	75	1856	2561	926	16581
	10	76	2125	2933	553	14852
	11	77	2588	3571	501	14514
	12	77	2926	4038	619	14852
	13	77	3854	5319	419	16711
	14	76	3854	5319	426	18884
	15	76	3854	5319	595	21057
	16	76	4814	6643	319	24015
	17	76	4814	6643	412	26704
	18	76	4814	6643	305	28930
	19	76	4814	6643	381	30818
	20	78	4814	6643	296	31778
	21	79	4054	5595	231	31978
	22	79	4054	5595	419	32178
	23	77	4814	6643	401	32178
	24	78	4054	5595	391	31418
	25	78	4054	5595	377	30658
	26	77	4814	6643	534	30658
	27	77	4814	6643	1200	30658
	28	77	4814	6643	948	31418
	29	76	4814	6643	667	32178
	30	77	4814	6643	747	32178
	31	77	4814	6643	403	32938

	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	76.774193548		3789.483870968		5229.516129032		489.967741935		26410.774193548	
	Daily Max	79		4814		6643		1200		32938	
	Daily Max - Variable							1200			
	Daily Min	75		1681		2320		231		14514	
	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	2942	0
	2	2800	0
	3	2517	0
	4	2327	0
	5	2281	0
	6	2246	0
	7	2347	0
	8	3119	0
	9	3326	0
	10	3608	0
	11	3813	0
	12	4118	0
	13	4218	0
	14	4217	0
	15	4039	0
	16	3432	0
	17	3290	0
	18	3094	0
	19	2856	0
	20	2733	0
	21	2538	0
	22	2362	0
	23	2444	0
	24	2424	0
	25	2496	0
	26	2649	0
	27	3553	0
	28	4270	0
	29	4518	0
	30	4864	0
	31	4875	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	3236		0	
	Daily Max	4875		0	
	Daily Max - Variable	4875			
	Daily Min	2246		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

I certify that management practices identified in the approved water quality trading plan as the source of pollutant reduction credits are installed, established and properly maintained.

Laboratory Quality Control Comments

BOD Blank Depletions: (8-10) 0.36, (8-11)0.29 (8-13)0.48 (8-15)0.32 (8-23)0.44 (8-24)0.31

Submitted by K3vin1 on 09/15/2021 8:56:52 AM