

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: 05/01/2020 - 05/31/2020
 Form Due Date: 06/21/2020
 Permit Number: 0031232

Date Received:
 DOC: 445096
 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	5.787	2.872	276	6	188
	2	5.611	3.011	248	7	180
	3	5.545	2.698	213	7	228
	4	5.528	2.783	232	14	204
	5	5.397	2.806	570	9	264
	6	5.182	2.763	293	16	240
	7	5.170	3.090	262	8	204
	8	4.997	4.769	442	8	168
	9	4.930	4.930	228	7	200
	10	4.946	4.946	260	8	204
	11	4.839	3.485	262	9	240
	12	4.991	2.331	214	9	228
	13	4.861	1.607	307	14	348
	14	4.934		226	9	196
	15	4.850	1.433	338	8	216
	16	4.688	1.426	226	7	216
	17	14.796	12.262	193	24	240
	18	17.578	14.769	87	44	116
	19	11.265	8.178	112	7	104
	20	9.318	6.051	117	6	120
	21	8.290	5.037	149	7	160
	22	7.615	4.795	119	6	44
	23	7.608	4.870	155	7	84
	24	7.430	4.877	100	5	144
	25	7.236	4.668	228	7	164
	26	7.149	3.457	199	9	156
	27	6.471	2.471	230	8	188
	28	20.297	16.541	141	15.9	152
	29	12.170	9.059	113	6	84
	30	9.245	6.134	263	5	88
	31	8.222	5.384	152	5	120

	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	7.643419355	5.116766667	224.35483871	9.932258065	177.032258065
	Daily Max	20.297	16.541	570	44	348
	Daily Max - Variable					
	Daily Min	4.688	1.426	87	5	44
	Geometric Mean -					
	Geometric Mean -					
	Week 1 Avg				9.571428571	
	Week 2 Avg				9.142857143	
	Week 3 Avg				14.714285714	
	Week 4 Avg				8.271428571	
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					
	5	<1.3	8.5	79.4	7.7	6.2
	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	8.5	79.4	7.7	6.2
	Daily Max	<1.3	8.5	79.4	7.7	6.2
	Daily Max - Variable					
	Daily Min	<1.3	8.5	79.4	7.7	6.2
	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		7.3	10	<100	9.2
	2		7.8			8.8
	3		7.4			6.8
	4		7.3		<100	13.6
	5	156	7.4		<100	8.8
	6		7.4		<100	15.2
	7		7.4		<100	9.6
	8		7.3		<100	5.6
	9		7.2			6.8
	10		7.2			8.4
	11		7.3	8	<100	7.6
	12		7.3		<100	7.2
	13		7.3		<100	14.4
	14		7.2		<100	10.4
	15		7.3		<100	7.6
	16		7.0			6.8
	17		6.9			42
	18		7.1		<100	76
	19		7.3	195	<100	11.2
	20		7.5		<100	4.8
	21		7.3		<100	6.8
	22		7.3	8	<100	6.4
	23		7.1		<100	5.2
	24		7.1		<100	4.4
	25		7.1		<100	6
	26		7.4		<100	8.8
	27		7.3		<100	5.2
	28		7.3		<100	17.3
	29		7.3		<100	8.8
	30		7.4		<100	7.2
	31		7.5		<100	4

	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	156	7.290322581	55.25	0	11.641935484		
	Daily Max	156	7.8	195	<100	76		
	Daily Max - Variable							
	Daily Min	156	6.9	8	<100	4		
	Geometric Mean -			18.795489742				
	Geometric Mean -			195				
	Week 1 Avg				0	10.285714286		
	Week 2 Avg				0	8.628571429		
	Week 3 Avg				0	22.171428571		
	Week 4 Avg				0	7.614285714		
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	220	0	220	0.14	3.35
	2	221	0	221	0.20	5.02
	3	153	0	153	0.18	4.05
	4	316	0	316	0.34	7.89
	5	206	0	206	0.13	3.04
	6	350	0	350	0.33	7.60
	7	247	0	247	0.23	5.93
	8	223	0	223	0.18	7.16
	9	280	0	280	0.19	7.81
	10	346	0	346	0.17	7.01
	11	221	0	221	0.20	5.81
	12	140	0	140	0.21	4.08
	13	193	0	193	0.32	4.29
	14	139	0	139	0.21	2.80
	15	91	0	91	0.19	2.27
	16	81	0	81	0.16	1.90
	17	4295	0	4295	0.54	55.22
	18	9361	0	9361	0.93	114.55
	19	764	0	764	0.07	4.77
	20	242	0	242	0.09	4.54
	21	286	815	1345	0.11	4.62
	22	256	0	256	0.08	3.20
	23	211	0	211	0.10	4.06
	24	179	0	179	0.09	3.66
	25	234	0	234	0.10	3.89
	26	254	0	254	0.14	4.04
	27	107	0	107	0.13	2.68
	28	2387	0	2387	0.48	66.22
	29	665	0	665	0.13	9.82
	30	368	0	368	0.12	6.14
	31	180	0	180	0.09	4.04

	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	748.903225806	26.290322581	783.064516129	0.212258065	11.982580645	
	Daily Max	9361	815	9361	0.93	114.55	
	Daily Max - Variable						
	Daily Min	81	0	81	0.07	1.9	
	Geometric Mean -						
	Geometric Mean -						
	Week 1 Avg			244.714285714			
	Week 2 Avg			220.285714286			
	Week 3 Avg			2311.285714286			
	Week 4 Avg			518.285714286			
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	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					
	3	0.5				
	4	0.6				
	5	0.4	<1.3	<2.5	7.0	<5.9
	6	0.5				
	7	0.5				
	8					
	9					
	10	0.7				
	11	0.8				
	12	0.6				
	13	0.8				
	14	0.6				
	15					
	16					
	17	1.2				
	18	0.1				
	19	0.3				
	20	0.3				
	21	0.4				
	22					
	23					
	24	0.4				
	25	0.6				
	26	0.5				
	27	0.7				
	28	0.82				
	29					
	30					
	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	0.558095238	0	0	7	0
	Daily Max	1.2	<1.3	<2.5	7	<5.9
	Daily Max - Variable					
	Daily Min	0.1	<1.3	<2.5	7	<5.9
	Geometric Mean -					
	Geometric Mean -					
	Week 1 Avg	0.5				
	Week 2 Avg	0.7				
	Week 3 Avg	0.46				
	Week 4 Avg	0.604				
Limit(s) in Effect	Monthly Avg	11	0			
	Daily Max	17	0			
	Daily Max - Variable					
	Daily Min					
	Geometric Mean -					
	Geometric Mean -					
	Weekly Avg	17	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			2.915	8800	9993
	2			2.600	8830	9443
	3			2.847	8690	8900
	4			2.745	8260	8703
	5	5.8	24.1	2.591	7780	8645
	6			2.419	7220	8390
	7			2.080	5140	7988
	8			0.225	3360	7100
	9			0	3410	5875
	10			0	3510	4783
	11			1.354	4400	3855
	12			2.660	5020	3670
	13			3.254	5040	4713
	14			3.335	4390	4713
	15			3.417	3870	4713
	16			3.262	3860	4580
	17			2.534	4130	4290
	18			2.809	5460	4063
	19			3.087	6680	4330
	20			3.267	7810	5033
	21			3.253	8180	6020
	22			2.820	9490	7033
	23			2.738	11000	8040
	24			2.553	11000	9120
	25			2.568	11000	9918
	26			3.692	11000	10623
	27			4.000	10900	11000
	28			3.756	11600	10975
	29			3.111	12800	11125
	30			3.111	13700	11575
	31			2.838	14200	12250

	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	5.8	24.1	2.640032258	7759.032258065	7466.419354839
	Daily Max	5.8	24.1	4	14200	12250
	Daily Max - Variable					
	Daily Min	5.8	24.1	0	3360	3670
	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	47	5568	7684	149	0
	2	49	5568	7684	164	0
	3	51	5568	7684	168	0
	4	53	5568	7684	334	0
	5	53	5568	7684	201	0
	6	52	5568	7684	366	0
	7	52	5568	7684	213	38976
	8	53	5568	7684	321	38976
	9	53	5568	7684	302	38976
	10	51	5568	7684	330	38976
	11	51	5568	7684	249	38976
	12	50	5568	7684	167	38976
	13	53	5568	7684	93	38976
	14	53	5568	7684	93	38976
	15	53	5568	7684	93	38976
	16	55	5568	7684	88	38976
	17	57	5568	7684	2403	38976
	18	56	5568	7684	5420	38976
	19	53	5568	7684	502	38976
	20	53	5568	7684	296	38976
	21	56	5568	7684	302	38976
	22	59	5568	7684	254	38976
	23	62	5568	7684	286	38976
	24	62	5568	7684	201	38976
	25	63	5568	7684	280	38976
	26	65	5568	7684	271	38976
	27	67	5568	7684	166	38976
	28	70	5568	7684	2193	38976
	29	71	5568	7684	471	38976
	30	69	5568	7684	249	38976
	31	67	5568	7684	230	38976

	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	56.741935484	5568	7684	543.709677419	31432.258064516
	Daily Max	71	5568	7684	5420	38976
	Daily Max - Variable				5420	
	Daily Min	47	5568	7684	88	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	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	1466	0
	2	1491	0
	3	1465	0
	4	1640	0
	5	1604	0
	6	1597	0
	7	1596	0
	8	1768	0
	9	1906	0
	10	2068	0
	11	1983	0
	12	1949	0
	13	1448	0
	14	1448	0
	15	1448	0
	16	1234	0
	17	3307	0
	18	8478	0
	19	8812	0
	20	8917	0
	21	9104	0
	22	9264	0
	23	9262	0
	24	7260	0
	25	2120	0
	26	1889	0
	27	1760	0
	28	3651	0.686
	29	3869	0
	30	3832	0
	31	3861	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	3596.677419355	0.022129032
	Daily Max	9264	0.686
	Daily Max - Variable	9264	
	Daily Min	1234	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 Exceedances: 5-8 (0.25)5-9(0.30)5-27(0.70)5-28(0.46)
BOD Blanks Had water quality issues. Faulty Salt Softener on 5-27&5-28.

Submitted by K3vin1 on 07/14/2020 2:13:36 PM