



700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
www.msdlouky.org

February 23, 2015

Cheryl Edwards
Permit Support Section
Surface Water Permits Branch
Division of Water
200 Fair Oaks Lane 4th Floor
Frankfort, KY 40601

**Re: Morris Forman Water Quality Treatment Center
KPDES Permit No. KY0022411**

Dear Ms. Edwards:

In accordance with the provisions of the KPDES Permit referenced above, the monthly Discharge Monitoring Report (DMR) and monthly Discharge (overflow) Reports for the reporting period January 1st to January 31st are provided through NetDMR. All permit requirements were met for the month of January, 2015.

Should you have any questions, please contact me at (502) 540-6793.

Sincerely,

A handwritten signature in black ink that reads "Alex E. Novak". The signature is written in a cursive style.

Alex E. Novak, P.E.
Director of Operations

vgt



Beneficial Use of Louisville's Biosolids
www.louisvillegreen.com

DMR Copy of Record

Permit			
Permit #:	KY0022411	Permittee:	MORRIS FORMAN WQTC MSD
Major:	Yes	Permittee Address:	4522 ALGONQUIN PKWY LOUISVILLE, KY 40211
Permitted Feature:	001 External Outfall	Discharge:	001-1 MUNICIPAL DISCHARGE
Facility:		Facility Location:	MORRIS FORMAN WQTC MSD 4522 ALGONQUIN PKWY JEFFERSON COUNTY (JEFFERSON,KY), KY 40211

Report Dates & Status			
Monitoring Period:	From 01/01/15 to 01/31/15	DMR Due Date:	02/28/15
Status:	NetDMR Validated		

Considerations for Form Completion
 G - INFLUENTE - SECONDARY EFFLUENT1 - FINAL EFFLUENT - Parameter 74055 - Use Season 1 for summer months (May, June, July, August, September, and October) and Season 2 for winter months (November, December, January, February March, and April); enter NODI=9 for the Season not needed.

Principal Executive Officer			
First Name:	Greg	Title:	Executive Director
Last Name:	Heitzman	Telephone:	502-540-6000

No Data Indicator (NODI)
 Form NODI: --

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading					Quality or Concentration					# of Ex.	Frequency of Analysis	Sample Type						
					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3				Value 3	Units				
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample	=	5				=	19	- mg/L					0	01/01 - Daily	GR - GRAB			
					Permit Req.	>=	2 INST MIN																
					Value NODI																		
00310	BOD, 5-day, 20 deg. C	E - Secondary/Biological Process Complete	0	--	Sample	=	12288	=	13691	26 - lb/d	=	21	=	25	19 - mg/L				0	01/01 - Daily	CP - COMPOS		
					Permit Req.		Req Mon MO AVG		Req Mon MX WK AV	26 - lb/d		<=	30 MO AVG	<=	45 MX WK AV	19 - mg/L							
					Value NODI																		
00310	BOD, 5-day, 20 deg. C	G - Raw Sewage Influent	0	--	Sample	=	286999	=	316928	26 - lb/d	=	487	=	551	19 - mg/L				0	01/01 - Daily	CP - COMPOS		
					Permit Req.		Req Mon MO AVG		Req Mon MX WK AV	26 - lb/d			Req Mon MO AVG		Req Mon MX WK AV	19 - mg/L							
					Value NODI																		
00400	pH	1 - Effluent Gross	0	--	Sample	=	6.4				=	6.9		12 - SU					0	01/01 - Daily	GR - GRAB		
					Permit Req.	>=	6 MINIMUM					<=	9 MAXIMUM	12 - SU									
					Value NODI																		
00530	Solids, total suspended	E - Secondary/Biological Process Complete	0	--	Sample	=	14294	=	14626	26 - lb/d	=	24	=	27	19 - mg/L				0	01/01 - Daily	CP - COMPOS		
					Permit Req.		Req Mon MO AVG		Req Mon MX WK AV	26 - lb/d		<=	30 MO AVG	<=	45 MX WK AV	19 - mg/L							
					Value NODI																		
00530	Solids, total suspended	G - Raw Sewage Influent	0	--	Sample	=	289219	=	313961	26 - lb/d	=	483	=	519	19 - mg/L				0	01/01 - Daily	CP - COMPOS		
					Permit Req.		Req Mon MO AVG		Req Mon MX WK AV	26 - lb/d			Req Mon MO AVG		Req Mon MX WK AV	19 - mg/L							
					Value NODI																		
00610	Nitrogen, ammonia total [as N]	E - Secondary/Biological Process Complete	0	--	Sample	=	8834	=	9968	26 - lb/d	=	14.7	=	14.8	19 - mg/L				0	01/01 - Daily	CP - COMPOS		
					Permit Req.		Req Mon MO AVG		Req Mon MX WK AV	26 - lb/d		<=	20 MO AVG	<=	30 MX WK AV	19 - mg/L							
					Value NODI																		
00610	Nitrogen, ammonia total [as N]	G - Raw Sewage Influent	0	--	Sample	=	9223	=	9838	26 - lb/d	=	15.4	=	17.2	19 - mg/L				0	01/01 - Daily	CP - COMPOS		
					Permit Req.		Req Mon MO AVG		Req Mon MX WK AV	26 - lb/d			Req Mon MO AVG		Req Mon MX WK AV	19 - mg/L							
					Value NODI																		
50050	Flow, in conduit or thru treatment plant	E - Secondary/Biological Process Complete	0	--	Sample	=	72.3	=	107.34	03 - MGD									0	99/99 - Continuous	CN - CONTIN		
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD													
					Value NODI																		
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample								<	0.015	19 - mg/L				0	01/01 - Daily	GR - GRAB		
					Permit Req.								<=	.019 DAILY MX	19 - mg/L								
					Value NODI																		
74055	Coliform, fecal general	1 - Effluent Gross	2	--	Sample						=	110	=	184	13 - #/100mL				0	01/01 - Daily	GR - GRAB		
					Permit Req.							<=	1000 30DA GEO	<=	2000 7 DA GEO	13 - #/100mL							
					Value NODI																		
81010	BOD, 5-day, percent removal	K - Percent Removal	0	--	Sample						=	95			23 - %				0	01/30 - Monthly	CA - CALCTD		
					Permit Req.							>=	85 MO MIN	23 - %									
					Value NODI																		
81011	Solids, suspended percent removal	K - Percent Removal	0	--	Sample						=	95			23 - %				0	01/30 - Monthly	CA - CALCTD		
					Permit Req.							>=	85 MO MIN	23 - %									
					Value NODI																		

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments
 No Bypasses for January 2015

Attachments

Name	Type	Size
MFWQTC012015Coverletter.pdf	pdf	34572
MFWQTC012015MOR.pdf	pdf	98104

Report Last Saved By

MORRIS FORMAN WQTC MSD

User: robin.burch@louisvillemsd.org

Date/Time: 2015-02-23 08:37 (Time Zone: -05:00)

Name: Robin Burch

E-Mail: robin.burch@louisvillemsd.org

DMR Copy of Record

Permit			
Permit #:	KY0022411	Permittee:	MORRIS FORMAN WQTC MSD
Major:	Yes	Permittee Address:	4522 ALGONQUIN PKWY LOUISVILLE, KY 40211
Permitted Feature:	001 External Outfall	Discharge:	001-B SECONDARY BYPASS
Facility:		Facility:	MORRIS FORMAN WQTC MSD
		Facility Location:	4522 ALGONQUIN PKWY JEFFERSON COUNTY (JEFFERSON,KY), KY 40211

Report Dates & Status			
Monitoring Period:	From 01/01/15 to 01/31/15	DMR Due Date:	02/28/15
Status:	NetDMR Validated		

Considerations for Form Completion
 MONITORING DURING PERIODS OF SECONDARY BYPASS IN ADDITION TO REGULAR MONITORING.1 - FINAL EFFLUENTF - SECONDARY BYPASS AFTER PRIMARYTREATMENT.

Principal Executive Officer			
First Name:	Greg	Title:	Executive Director
Last Name:	Heitzman	Telephone:	502-540-6000

No Data Indicator (NODI)
 Form NODI: --

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading					Quality or Concentration					# of Ex.	Frequency of Analysis	Sample Type			
					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3				Value 3	Units	
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample						=	23	=	30	19 - mg/L	01/04 - Once Every 4 Days	CP - COMPOS			
					Permit Req.										Req Mon MO AVG	Req Mon MX WK AV	19 - mg/L 0	WH/DS - When Discharging	CP - COMPOS	
					Value NODI															
00310	BOD, 5-day, 20 deg. C	F - Primary/Preliminary Process Complete	0	--	Sample						=	174	=	256	19 - mg/L	01/04 - Once Every 4 Days	CP - COMPOS			
					Permit Req.										Req Mon MO AVG	Req Mon MX WK AV	19 - mg/L 0	WH/DS - When Discharging	CP - COMPOS	
					Value NODI															
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample						=	28	=	37	19 - mg/L	01/04 - Once Every 4 Days	CP - COMPOS			
					Permit Req.										Req Mon MO AVG	Req Mon MX WK AV	19 - mg/L 0	WH/DS - When Discharging	CP - COMPOS	
					Value NODI															
00530	Solids, total suspended	F - Primary/Preliminary Process Complete	0	--	Sample						=	116	=	139	19 - mg/L	01/04 - Once Every 4 Days	CP - COMPOS			
					Permit Req.										Req Mon MO AVG	Req Mon MX WK AV	19 - mg/L 0	WH/DS - When Discharging	CP - COMPOS	
					Value NODI															
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	--	Sample						=	12.6	=	13.4	19 - mg/L	01/04 - Once Every 4 Days	CP - COMPOS			
					Permit Req.										Req Mon MO AVG	Req Mon MX WK AV	19 - mg/L 0	WH/DS - When Discharging	CP - COMPOS	
					Value NODI															
00610	Nitrogen, ammonia total [as N]	F - Primary/Preliminary Process Complete	0	--	Sample						=	17	=	19.8	19 - mg/L	01/04 - Once Every 4 Days	CP - COMPOS			
					Permit Req.										Req Mon MO AVG	Req Mon MX WK AV	19 - mg/L 0	WH/DS - When Discharging	CP - COMPOS	
					Value NODI															
50050	Flow, in conduit or thru treatment plant	F - Primary/Preliminary Process Complete	0	--	Sample	=	6.5	=	0	03 - MGD								01/04 - Once Every 4 Days	CN - CONTIN	
					Permit Req.		Req Mon MO AVG		Req Mon MX WK AV	03 - MGD								0	WH/DS - When Discharging	CN - CONTIN
					Value NODI															

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments

Attachments
 No attachments.

Report Last Saved By
MORRIS FORMAN WQTC MSD

User:	robin.burch@louisvillemsd.org	Date/Time:	2015-02-23 08:36 (Time Zone: -05:00)
Name:	Robin Burch		
E-Mail:	robin.burch@louisvillemsd.org		

Press (Ctrl r) to recalculate spreadsheet.

MORRIS FORMAN WATER QUALITY TREATMENT CENTER JEFFERSON COUNTY, KENTUCKY MONTH OF January 2015
 KPDEB PERMIT NO. KY0022411 PLANT CAPACITY - 120 MGD RECEIVING STREAM-OHIO RIVER

DATE	WASTEWATER FLOWS (Million Gallons)			TEMP (DEGF)		pH		SETS (M/L)		TSS (mg/L)		D.O. (mg/L)	5-DAY BOD (mg/L)			RETURN SLUDGE			AERATION BASIN				ACTIVE		CHLORINATION			FINAL EFFLUENT				
	Final	Sec.	Bypass	raw	final	raw	final	raw	final	raw	final	final	raw	prim.	final	final	FLOW MG	TSS g/L	TVSS g/L	D.O. mg/L	MLSS g/L	MLVSS g/L	SET	SVI	Sludge Wasted MG	Primary Sludge MG	Chlorine Dosage KLBS	Resid mg/L	Fecal Coliform #/100 ml	NH3-N mg/L	Pump. Hours	
	Effluent	Effluent																														
1/1	68.70	68.70	0.00	55	55	7.3	6.6	12.0	0.1	282	13	6.8	276	122	8	27.1	10.0	8.4	15.7	3.0	2.6	293	96	0.52	0.34	1.04	0.015	310	16	0.00		
1/2	71.30	71.30	0.00	57	57	7.3	6.9	16.0	0.1	328	12	7.0	299	110	9	26.8	11.1	9.4	16.4	3.5	2.9	308	89	0.57	0.35	1.01	0.015	103	18	0.00		
1/3	122.28	106.86	15.42	57	57	7.2	6.7	16.5	0.1	404	21	8.4	256	119	19	27.2	11.5	9.7	17.4	3.8	3.2	323	86	0.59	0.22	2.83	0.015	152	17	0.00		
1/4	117.88	107.34	10.54	56	56	6.9	6.7	11.0	0.1	276	17	11.4	174	67	12	27.4	10.4	8.6	19.2	2.8	2.3	333	118	0.60	0.17	2.30	0.015	94	10	16.82		
1/5	75.95	75.95	0.00	52	52	6.7	6.6	12.0	0.1	320	13	9.9	367	168	10	27.1	9.8	8.2	15.7	2.9	2.4	273	94	0.60	0.28	1.02	0.015	50	14	23.98		
1/8	79.10	79.10	0.00	54	54	7.2	6.7	19.0	0.1	388	22	5.7	381	193	23	26.7	10.2	8.5	10.5	3.3	2.8	288	88	0.59	0.31	1.20	0.015	1300	14	23.99		
1/7	72.72	72.72	0.00	52	52	7.1	6.6	17.0	0.2	416	29	7.2	532	218	24	26.6	9.3	7.8	12.9	3.1	2.5	277	90	0.54	0.31	1.24	0.015	237	13	13.07		
1/8	73.85	73.85	0.00	47	47	7.3	6.6	13.0	0.1	572	21	7.2	402	166	17	27.1	10.6	9.1	15.1	3.2	2.8	272	84	0.49	0.27	1.56	0.015	44	12	2.61		
1/9	70.62	70.62	0.00	51	51	7.0	6.6	35.0	0.1	964	22	8.4	652	251	18	26.8	10.5	9.0	15.1	3.1	2.6	308	99	0.58	0.25	1.49	0.015	44	15	0.00		
1/10	66.15	66.15	0.00	53	53	7.3	6.6	24.0	0.1	424	28	6.8	448	264	23	26.7	11.0	9.9	13.2	3.5	3.0	366	103	0.58	0.31	1.70	0.015	460	12	0.00		
1/11	72.14	72.14	0.00	53	53	7.5	6.7	24.0	0.1	358	20	6.3	338	151	15	26.8	10.8	9.5	16.2	3.7	3.2	393	105	0.63	0.16	1.82	0.015	19	14	0.00		
1/12	95.55	95.55	0.00	54	54	7.5	6.7	18.0	0.1	412	22	8.5	418	168	15	27.0	11.5	9.8	17.3	3.0	2.5	273	94	0.69	0.22	2.21	0.015	147	13	0.00		
1/13	76.62	76.62	0.00	52	52	7.3	6.7	20.0	0.1	422	32	6.7	392	199	28	26.9	11.6	9.9	13.3	3.3	2.8	294	91	0.68	0.29	1.89	0.015	570	17	0.00		
1/14	69.10	69.10	0.00	54	54	7.1	6.7	18.0	0.1	390	30	7.1	480	229	24	27.1	11.8	10.2	14.8	4.2	3.6	317	76	0.64	0.35	1.99	0.015	50	17	0.00		
1/15	68.50	68.50	0.00	55	55	7.1	6.6	30.0	0.1	540	35	6.5	721	340	42	27.3	11.5	10.2	15.9	3.9	3.5	451	117	0.64	0.38	2.05	0.015	70	15	0.00		
1/16	64.68	64.68	0.00	56	56	7.1	6.6	13.2	0.1	576	40	8.2	670	271	36	27.4	12.3	11.3	14.5	3.7	3.2	352	99	0.75	0.33	2.01	0.015	24	13	0.00		
1/17	64.24	64.24	0.00	60	60	7.2	6.6	14.2	0.2	460	39	8.2	474	256	34	27.6	13.2	12.1	15.2	4.7	4.4	484	103	0.82	0.25	1.94	0.015	400	16	0.00		
1/18	68.47	68.47	0.00	59	59	7.4	6.7	19.0	0.1	446	41	7.2	385	262	32	27.6	12.0	10.6	15.6	4.4	3.8	339	76	0.72	0.28	1.58	0.015	270	15	0.00		
1/19	62.77	62.77	0.00	57	57	7.3	6.5	18.0	0.1	402	35	7.9	624	215	29	27.5	12.8	11.1	16.7	3.8	3.4	366	96	0.65	0.29	1.50	0.015	240	15	0.00		
1/20	63.90	63.90	0.00	57	57	7.2	6.6	30.0	0.1	516	28	6.8	599	208	25	27.4	11.2	9.7	15.4	4.0	3.5	394	98	0.70	0.27	1.50	0.015	176	16	0.00		
1/21	63.02	63.02	0.00	59	59	7.1	6.4	19.5	0.1	468	20	7.2	181	106	16	27.1	11.6	10.4	11.6	4.4	3.9	390	89	0.67	0.30	1.58	0.015	176	16	0.00		
1/22	66.32	66.32	0.00	58	58	7.2	6.4	20.0	0.1	356	27	6.2	546	292	18	24.9	11.1	9.7	12.3	4.3	3.8	458	107	0.68	0.33	1.39	0.015	55	17	0.00		
1/24	66.30	66.30	0.00	58	58	7.2	6.7	19.5	0.2	488	36	6.0	500	296	28	25.9	13.4	11.7	12.7	4.3	3.7	427	101	0.72	0.37	1.55	0.015	24	16	0.00		
1/25	75.94	75.92	0.02	59	59	7.2	6.6	28.0	0.4	644	39	6.5	667	284	25	27.7	13.4	11.7	12.8	3.8	3.3	429	114	0.75	0.42	1.60	0.015	112	17	0.00		
1/26	75.82	75.81	0.01	57	57	7.3	6.8	20.0	0.5	488	34	6.4	458	227	32	28.1	13.5	11.9	12.4	3.7	3.3	35.6	96	0.73	0.47	1.90	0.015	104	13	0.00		
1/27	68.08	68.08	0.00	56	56	7.2	6.6	17.0	0.4	380	28	6.5	432	248	23	28.0	12.8	11.1	11.5	4.8	4.2	574	119	0.79	0.31	1.70	0.015	15	13	0.00		
1/28	63.96	63.96	0.00	57	57	7.2	6.7	33.0	0.3	688	34	6.5	724	318	27	27.8	13.0	11.4	13.3	4.7	4.1	506	108	1.04	0.37	1.60	0.015	39	17	0.00		
1/29	72.52	72.52	0.00	59	59	7.1	6.5	26.0	0.6	720	42	5.0	688	330	35	28.2	13.4	11.8	11.3	4.5	4.0	528	117	1.32	0.37	1.86	0.015	92	14	0.00		
1/30	61.45	61.45	0.00	58	58	7.0	6.8	19.8	0.1	548	33	6.8	731	382	44	28.5	13.2	11.9	11.2	4.7	4.4	527	111	1.31	0.39	0.83	0.015	205	16	0.00		
1/31	62.10	62.10	0.00	57	57	7.0	6.6	29.8	0.1	684	45	5.4	738	524	45	28.5	13.6	12.1	11.8	5.0	4.6	506	103	1.30	0.33	1.37	0.015	390	15	0.00		
Total	2267.1	2241.1	26.0													844.8	27.3	11.7	10.2	14.2	3.9	3.4	372	99	22.630	9.653						
Average	73.1	72.3	0.8	55.7	55.7	7.2	6.8	20.5	0.2	482	28	7.1	487	233	25																	80.46

SEWER CONNECTIONS 130746 TIMES 4 = 522984 SEWER POPULATION

IND. WASTER POPULATION EQ
 CUSTOMERS 307
 FLOW 173520
 BOD 1222661
 TSS 877509

Authorized Agent



Certification No. 5691

MORRIS FORMAN WASTEWATER TREATMENT PLANT

JEFFERSON COUNTY, KY

Month of Jan-15

Average Flow

SETTLING TANKS	Primary	Secondary		
		Battery A	Battery B	Battery C
Average Flow (MGD)	73.13	22.13	27.51	8.82
Tanks in Service	4.00	8.0	7.3	4.0
Surface Area (Ft.2)	77000.00	69200.00	63145.00	34336.18
Volume (MG)	8.33	7.09	6.47	3.52
Weir Length (Ft.)	2860.00	2868.00	2617.05	1423.07
Avg. Weir Overflow (GPD/Ft)	25570.95	7714.51	10510.32	6195.00
Avg. Settling Rate (GPD/Ft2)	949.78	479.03	609.80	400.99
Avg. Detention Time	2.73	7.69	5.64	9.57

AERATION TANKS

	Battery A	Battery B	Battery C
Volume (Gallons)	4200000	4200000	2100000
Avg. Flow (MGD)	33.15	38.51	13.77
Avg. Detention Time (Hours)	4.56	3.66	5.72

CHLORINE CONTACT CHAMBERS

Contact Chambers in Use	2.0
Volume (Gallons)	2340000
Avg. Detention Time (Hours)	1.27

Remarks: BY-PASS REPORTS (See Attached)