



700 West Liberty Street | Louisville, KY 40203-1911
Phone: 502.540.6000 | LouisvilleMSD.org

August 14, 2021

Crystal Dennis
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. Dennis:

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 July 1st through July 31st 2021 are provided through NetDMR. The Morris Forman Water Quality Treatment Center (MFWQTC) did not meet permit for 30 day BOD, 7 day BOD, 30 day TSS, 7 day TSS, and TSS percent removal reporting requirements.

Compromised solids handling equipment continue to contribute to our effluent exceedances. MSD has installed dewatering services at a satellite facility. This dewatering service has reduced the solids loading to the Morris Forman plant. Additionally an Emergency Design Build Project for new solids handling equipment will be installed and in service in late 2021 at Morris Forman.

Should you have any questions, please contact me at (502) 540-6765.

Sincerely,

James Skinner
Treatment Facilities Manager

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

Parameter		Monitoring Location	Field	Type	Description	Acknowledge
Code	Name					
00310	BOD, 5-day, 20 deg. C	E - Secondary/Biological Process Complete	Quality or Concentration Sample Value 2	Soft	The provided sample value is outside the permit limit. Please verify that the value you have provided is correct.	Yes
00310	BOD, 5-day, 20 deg. C	E - Secondary/Biological Process Complete	Quality or Concentration Sample Value 3	Soft	The provided sample value is outside the permit limit. Please verify that the value you have provided is correct.	Yes
81011	Solids, suspended percent removal	K - Percent Removal	Quality or Concentration Sample Value 1	Soft	The provided sample value is outside the permit limit. Please verify that the value you have provided is correct.	Yes
00530	Solids, total suspended	E - Secondary/Biological Process Complete	Quality or Concentration Sample Value 2	Soft	The provided sample value is outside the permit limit. Please verify that the value you have provided is correct.	Yes
00530	Solids, total suspended	E - Secondary/Biological Process Complete	Quality or Concentration Sample Value 3	Soft	The provided sample value is outside the permit limit. Please verify that the value you have provided is correct.	Yes

Comments**Attachments**

Name	Type	Size
MFWQTCDischarge072021.pdf	pdf	15536.0
MFWQTCMOR072021.Pdf	pdf	133206.0
MFWQTCoverletter072021.Pdf	pdf	40582.0

Report Last Saved By**Morris Forman WQTC MSD**

User: BURCH@LOUISVILLEMSD.ORG
 Name: Robin Burch
 E-Mail: robin.burch@louisvillemmsd.org
 Date/Time: 2021-08-23 06:06 (Time Zone: -04:00)

Report Last Signed By

User: SKINNER@LOUISVILLEMSD.ORG
 Name: James skinner
 E-Mail: james.skinner@louisvillemmsd.org
 Date/Time: 2021-08-23 06:07 (Time Zone: -04:00)

DMR Copy of Record

Permit					
Permit #:	KY0022411	Permittee:	Morris Forman WQTC MSD	Facility:	MORRIS FORMAN WQTC MSD
Major:	Yes	Permittee Address:	700 W Liberty St Louisville, KY 40203	Facility Location:	4522 ALGONQUIN PKWY LOUISVILLE, KY 40211
Permitted Feature:	001 External Outfall	Discharge:	001-B SECONDARY BYPASS		

Report Dates & Status					
Monitoring Period:	From 07/01/21 to 07/31/21	DMR Due Date:	08/28/21	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:	James A	Title:	Executive Director	Telephone:	502-540-6000
Last Name:	Parrot				

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															
					Permit Req.															
					Value NODI															
00310	BOD, 5-day, 20 deg. C	F - Primary/Preliminary Process Complete	0	--	Sample															
					Permit Req.															
					Value NODI															
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample															
					Permit Req.															
					Value NODI															
00530	Solids, total suspended	F - Primary/Preliminary Process Complete	0	--	Sample															
					Permit Req.															
					Value NODI															
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	--	Sample															
					Permit Req.															
					Value NODI															
00610	Nitrogen, ammonia total [as N]	F - Primary/Preliminary Process Complete	0	--	Sample															
					Permit Req.															
					Value NODI															
50050	Flow, in conduit or thru treatment plant	F - Primary/Preliminary Process Complete	0	--	Sample	=	36.1	=	43.2	03 - MGD										
					Permit Req.		Req Mon MO AVG		Req Mon MX WK AV	03 - MGD										
					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: BURCH@LOUISVILLEMSD.ORG
Name: Robin Burch
E-Mail: robin.burch@louisvillemsd.org
Date/Time: 2021-08-13 12:12 (Time Zone: -04:00)

Report Last Signed By
User: SKINNER@LOUISVILLEMSD.ORG

Name: James skinner
E-Mail: james.skinner@louisvillemsd.org
Date/Time: 2021-08-23 06:19 (Time Zone: -04:00)

Format: Month/Day/Year
 Enter Start Date : 7/1/21

MORRIS FORMAN WATER QUALITY TREATMENT CENTER JEFFERSON COUNTY, KENTUCKY MONTH OF July-21
 KPDES PERMIT NO. KY0022411 PLANT CAPACITY - 120 MGD RECEIVING STREAM-OHIO RIVER

DATE	WASTEWATER FLOWS (Million Gallons)			TEMP (DEGF)		pH		SETS (ML)		TSS (mg/L)		D.O. (mg/L)	5-DAY BOD (mg/L)			RETURN SLUDGE			AERATION BASIN					ACTIVE Sludge	Primary Sludge	CHLORINATION			FINAL EFFLUENT	
	Final	Sec.	Bypass	raw	final	raw	final	raw	final	raw	final	final	raw	final	final	FLOW	TSS	TVSS	D.O.	MLSS	MLVSS	SET	SVI	Wasted	Sludge	Chlorine Dosage	Resid	Fecal Coliform	NH3-N	Pump.
	Effluent	Effluent														MG	g/L	g/L	mg/L	g/L	g/L			MG	MG	KLBS	mg/L	#/100 ml	mg/L	Hours
7/1/21	175.60	111.96	63.64	72	72	7.1	6.4	8.0	0.3	260	103	4.4	244	208	78	25.8	18.0	16.0	0.8	5.6	5.1	328	59	0.64	0.41	6.78	0.016	4	11.8	1.4
7/2/21	138.48	127.75	10.73	70	70	7.2	6.3	4.0	0.1	166	111	6.6	130	67	53	25.6	17.9	15.8	8.1	3.7	3.3	271	73	0.25	0.25	6.78	0.016	67	2.7	0.0
7/3/21	89.57	89.57	0.00	71	71	7.4	6.4	7.0	0.5	168	146	6.0	130	65	50	25.6	19.1	16.6	11.2	4.4	3.8	316	72	0.00	0.08	5.17	0.016	235	3.7	0.0
7/4/21	68.47	68.47	0.00	71	71	7.3	6.4	7.8	0.1	156	52	6.9	106	68	20	25.5	17.8	15.4	18.1	5.6	4.9	392	70	0.19	0.05	3.44	0.016	14	8.7	0.0
7/5/21	64.96	64.96	0.00	71	71	7.4	6.4	9.0	0.1	154	82	6.6	99	60	35	25.3	17.4	15.1	17.8	5.3	4.6	384	73	0.67	0.38	1.13	0.016	14	19.3	0.0
7/6/21	80.77	80.77	0.00	72	72	7.1	6.6	11.0	0.1	243	88	5.8	165	84	32	25.4	14.9	12.8	19.7	6.0	5.2	304	55	0.51	0.38	2.73	0.016	4	17.9	0.0
7/7/21	93.45	93.45	0.00	73	73	7.2	6.7	4.5	0.1	152	25	5.4	199	142	20	25.4	16.3	14.3	7.4	4.8	4.3	318	65	0.45	0.38	1.77	0.016	4	12.7	0.0
7/8/21	97.86	83.73	14.13	73	73	7.2	6.5	7.5	0.1	234	41	6.2	179	111	26	24.9	15.3	13.3	8.5	4.6	4.0	391	84	0.59	0.37	2.79	0.016	255	13.9	0.0
7/9/21	84.39	82.45	1.94	73	73	7.2	6.4	7.5	0.1	254	39	5.4	247	138	18	25.3	13.9	12.1	11.8	3.6	3.1	348	96	0.32	0.22	2.79	0.016	117	10.9	0.0
7/10/21	126.54	98.53	28.01	72	72	7.2	6.4	7.6	0.1	302	56	5.1	167	109	30	25.3	14.8	12.8	10.0	3.8	3.2	348	92	0.00	0.05	4.02	0.016	61	10.1	0.0
7/11/21	222.16	136.93	85.23	72	72	7.1	6.4	3.5	0.4	139	96	6.6	63	32	39	24.6	15.5	13.3	19.5	2.8	2.4	242	87	0.24	0.05	5.69	0.016	157	5.0	0.0
7/12/21	198.13	128.75	69.38	70	70	7.3	6.6	4.0	0.3	183	62	5.8	79	39	27	24.5	13.8	11.6	20.4	2.4	2.1	209	85	0.60	0.36	5.69	0.016	34	8.3	0.0
7/13/21	126.82	125.12	1.70	73	73	7.1	6.7	6.0	0.1	172	33	6.7	154	90	18	24.5	15.3	12.6	16.4	2.7	2.2	213	79	0.50	0.37	4.62	0.016	40	9.2	0.0
7/14/21	97.41	97.41	0.00	71	71	7.1	6.6	7.5	0.1	216	13	5.1	190	104	10	24.4	14.8	12.2	12.0	3.2	2.7	268	85	0.62	0.39	2.44	0.016	90	7.9	0.0
7/15/21	83.29	83.29	0.00	72	72	7.1	6.6	9.0	0.1	215	15	5.6	205	121	8	24.4	15.0	12.5	11.6	3.9	3.3	304	78	0.56	0.30	1.84	0.016	4	12.2	0.0
7/16/21	91.58	86.87	4.71	72	72	7.3	6.5	10.0	0.1	260	18	6.6	196	112	10	23.4	15.1	12.7	8.8	3.6	3.1	340	95	0.35	0.19	2.44	0.016	97	13.0	0.0
7/17/21	220.14	138.52	81.62	72	72	7.1	6.4	4.5	0.1	222	40	5.0	110	52	28	24.2	16.2	13.6	12.4	3.0	2.6	256	85	0.00	0.04	2.63	0.016	244	4.9	0.0
7/18/21	95.68	95.68	0.00	71	71	7.2	6.4	8.4	0.1	370	31	6.3	152	77	15	23.5	16.8	14.0	12.5	3.6	3.0	281	79	0.00	0.01	2.34	0.016	53	8.2	0.0
7/19/21	79.99	79.99	0.00	73	73	7.2	6.5	9.0	0.1	210	39	6.3	134	83	18	25.9	14.9	12.3	15.5	6.1	5.0	390	64	0.00	0.00	2.18	0.016	37	19.5	0.0
7/20/21	74.94	74.94	0.00	74	74	6.9	6.5	8.0	0.1	292	59	6.0	320	188	28	26.2	16.3	13.4	9.1	4.4	3.6	400	93	0.00	0.00	2.37	0.016	14	11.7	0.0
7/21/21	71.50	71.50	0.00	73	73	6.9	6.4	10.0	0.2	328	96	5.3	384	250	43	26.6	15.6	13.1	2.1	5.3	4.5	464	89	0.00	0.00	2.37	0.016	233	9.1	0.0
7/22/21	68.81	68.81	0.00	73	73	7.0	6.3	11.0	0.1	296	84	6.3	329	201	42	26.6	16.8	14.1	1.9	5.2	4.2	474	94	0.00	0.00	1.88	0.016	97	7.0	0.0
7/23/21	65.91	65.91	0.00	73	73	7.0	6.4	10.0	0.5	296	136	6.0	336	224	56	26.7	17.6	14.8	2.3	5.1	4.3	526	104	0.00	0.00	2.71	0.016	600	7.8	0.0
7/24/21	65.56	65.56	0.00	75	75	6.9	6.3	10.0	0.2	357	64	4.5	288	217	37	25.7	16.3	13.7	2.1	6.0	5.0	503	85	0.00	0.00	2.71	0.016	114	9.3	0.0
7/25/21	61.97	61.97	0.00	75	75	6.9	6.3	13.0	0.3	273	96	6.0	301	199	42	25.2	17.8	15.4	1.8	5.8	5.0	534	103	0.00	0.00	2.68	0.016	61	6.6	0.0
7/26/21	60.20	60.20	0.00	74	74	6.8	6.3	12.2	1.9	278	194	4.8	389	250	101	25.7	17.3	14.7	2.4	5.3	4.6	529	100	0.34	0.00	2.75	0.016	27	9.9	0.0
7/27/21	62.11	62.11	0.00	75	75	6.6	6.4	12.0	0.5	395	167	5.0	483	341	106	25.8	16.7	14.5	0.5	5.1	4.4	474	94	0.75	0.00	3.58	0.016	174	12.6	0.0
7/28/21	62.16	62.16	0.00	75	75	6.8	6.2	11.0	0.2	455	88	5.4	482	308	51	25.6	18.3	15.8	0.5	7.2	6.3	513	71	1.28	0.02	3.58	0.016	620	10.4	0.0
7/29/21	66.35	66.35	0.00	77	77	6.8	6.1	11.0	0.2	372	67	5.8	428	280	45	25.5	17.0	14.8	0.5	5.7	5.0	482	83	1.14	0.13	3.33	0.016	230	8.8	0.0
7/30/21	63.27	63.27	0.00	76	76	6.9	6.2	10.2	0.1	356	69	5.2	377	247	40	26.0	18.1	15.7	1.1	5.5	4.8	451	84	0.68	0.10	3.33	0.016	187	7.6	0.0
7/31/21	62.40	62.40	0.00	74	74	7.0	6.4	10.1	0.7	240	172	4.5	596	452	117	26.4	18.4	16.1	0.5	5.0	4.3	488	102	0.00	0.00	2.97	0.016	94	9.4	0.0
Sum	3020.47	2659.38	361.09												0.0									10.67	4.50					1.4
Average	97.43	85.79	36.11	73	73	7.1	6.4	8.5	0.3	259	77	6	247	159	40	25.3	16.4	14.0	8.6	4.7	4.0	379	83	0.34	0.15	3.27	0.016	61	10.0	0.0

SEWER CONNECTIONS 148160 TIMES 4 = 592640 SEWER POPULATION IND. WASTER POPULATION EQ CUSTOMERS 388
 FLOW 358033
 BOD 536898
 TSS 421402

Authorized Agent

Certification No. 29841

MORRIS FORMAN WASTEWATER TREATMENT PLANT JEFFERSON COUNTY, KY

Month of Jul-21

Average Flow

Primary	Battery A Battery B Battery C
Secondary	

SETTLING TANKS

Average Flow (MGD)	99.82	25.67	28.31	10.15
Tanks in Service	4.00	7.8	8.0	4.0
Surface Area (ft ²)	77000.00	67324.20	69200.00	34600.00
Volume (MG)	8.33	6.90	7.09	3.54
Weir Length (ft)	2860.00	2790.26	2868.00	1434.00
Avg. Weir Overflow (GPD/ft)	34902.34	9199.21	9870.24	7075.11
Avg. Settling Rate (GPD/ft ²)	1296.37	543.95	553.58	418.02
Avg. Detention Time	2.00	6.45	6.01	8.38

AERATION TANKS

Volume (Gallons)	4200000	4200000	2100000
Avg. Flow (MGD)	36.62	38.31	14.46
Avg. Detention Time (Hours)	3.93	3.56	4.97

CHLORINE CONTACT CHAMBERS

Contact Chambers in Use	2.0
Volume (Gallons)	234000
Avg. Detention Time (Hours)	1.09

Remarks: BY-PASS REPORTS (See Attached)



KPDES #	Facility ID	Water Quality Treatment Center	Receiving Stream of Treatment Center	Region
KY0022420	MSD0202	HITE CREEK	HITE CREEK	NA

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMNSewer Main	117932-AG	5504 TIMBER CREEK CT		HARRODS CREEK	GROUND

Activity Code / Description	WO #	Ref No	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
: DISREV: RAIN EVENT DISCHARGE	3398324		07/11/2021	BRAZEL	GOODWIN	REPAIRED - ISSUE RESOLVED	07/11/2021	STRUCTURAL FAILURE	UNAUTHORIZED DISCHARGE- WATERS	07/11/21 04:50 PM	

Discharge Reporting:

Discharge Amount:	33,750 GAL
Cause:	FAILURE OF VALVE ON FORCE MAIN.
Clean Up:	MSD STAFF SPREAD LIME ON IMPACTED AREA.CONTRACTOR TO CLEAN AREA FOLLOWING REPAIRS.
Control Zone:	TEMPORARY SIGNS PLACED AROUND IMPACTED AREA.
Impact:	SEWAGE ON GROUND.
Repair:	MSD CONTRACTOR WILL REPAIR LEAKING VALVE.
Public Notification:	TEMPORARY SIGNS PLACED AROUND IMPACTED AREA.

Notifications:

7/12/21 1:00 AM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
7/12/21 1:00 AM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION



KPDES #	Facility ID	Water Quality Treatment Center	Receiving Stream of Treatment Center	Region
KY0078956	MSD0277	DEREK R. GUTHRIE	OHIO RIVER	NA

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SPLSewer Treatment Plant	MSD0277	11621 LOWER RIVER RD		OHIO RIVER	STREAM

Activity Code / Description	WO #	Ref No	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
: DISREV: RAIN EVENT DISCHARGE	3398293		07/11/2021	ROY	ROY	REPAIRED - ISSUE RESOLVED	07/11/2021	BYPASS AT WQTC	UNAUTHORIZED DISCHARGE-WATERS	07/20/21 10:02 AM	

Discharge Reporting:

Discharge Amount:	500,000 GAL
Cause:	PLANT NOT SET UP TO HANDLE RAIN EVENT.
Clean Up:	LIME TO BE SPREAD ON GROUND AFTER RAIN STOPS.
Control Zone:	CAUTION TAPE AREA.
Impact:	SOLIDS ON GROUND AROUND CLARIFIERS 1 TO 6.
Repair:	4 CLARIFIERS AND 1 CONTACT CHANNEL ADDED TO SERVICE.
Public Notification:	N/A

Notifications:

7/11/21 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
7/11/21 1:00 PM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION

Total Facilities Printed: 2

Total Work Orders Printed: 2