



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

May 20, 2020

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 April 1<sup>st</sup> to April 30<sup>th</sup> 2020 are provided through NetDMR. The Morris Forman Water Quality Treatment Center (MFWQTC) did not meet 30 day TSS, 7 day TSS and TSS percent removal for the reporting period.

Compromised solids handling equipment is contributing to our effluent exceedances. MSD has contracted with a third party for temporary dewatering services. This temporary dewatering service will reduce the solids loading to the Morris Forman plant.

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

Sincerely,

Alex E. Novak, P.E.  
Treatment Facilities Director



**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					
81011	Solids, suspended percent removal	K - Percent Removal	Quality or Concentration Sample Value 1	Soft	The provided sample value is outside the permit limit. <b>Please verify that the value you have provided is correct.</b> (Error Code: 1 )	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. <b>Please verify that the value you have provided is correct.</b> (Error Code: 1 )	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. <b>Please verify that the value you have provided is correct.</b> (Error Code: 1 )	Yes

**Comments****Attachments**

Name	Type	Size
April2020_OverflowReport_MorrisForman.pdf	pdf	34840.0
Coverletter042020.pdf	pdf	131124.0
MFWQTCMOR042020.pdf	pdf	83703.0

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

User: kessel@louisvillemsd.org  
 Name: John Kessel  
 E-Mail: kessel@louisvillemsd.org  
 Date/Time: 2020-05-21 09:57 (Time Zone: -04:00)

**Report Last Signed By**

User: kessel@louisvillemsd.org  
 Name: John Kessel  
 E-Mail: kessel@louisvillemsd.org  
 Date/Time: 2020-05-21 09:57 (Time Zone: -04:00)

**DMR Copy of Record**

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

<b>Report Dates &amp; Status</b>			
<b>Monitoring Period:</b> From 04/01/20 to 04/30/20	<b>DMR Due Date:</b> 05/28/20	<b>Status:</b>	<b>NetDMR Validated</b>

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

<b>Principal Executive Officer</b>			
<b>First Name:</b> James A.	<b>Title:</b> Executive Director	<b>Telephone:</b> 502-540-6000	
<b>Last Name:</b> Parrott			

**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
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample						=	54.0	=	68.0	19 - mg/L	0	12/30 - Twelve Per Month WH/DS - When Discharging	CP - COMPOS CP - COMPOS
					Permit Req.							Req Mon MO AVG		Req Mon MX WK AV	19 - mg/L			
					Value NODI													
00310	BOD, 5-day, 20 deg. C	F - Primary/Preliminary Process Complete	0	--	Sample						=	206.0	=	234.0	19 - mg/L	0	12/30 - Twelve Per Month WH/DS - When Discharging	CP - COMPOS CP - COMPOS
					Permit Req.							Req Mon MO AVG		Req Mon MX WK AV	19 - mg/L			
					Value NODI													
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample						=	73.0	=	104.0	19 - mg/L	0	12/30 - Twelve Per Month WH/DS - When Discharging	CP - COMPOS CP - COMPOS
					Permit Req.							Req Mon MO AVG		Req Mon MX WK AV	19 - mg/L			
					Value NODI													
00530	Solids, total suspended	F - Primary/Preliminary Process Complete	0	--	Sample						=	104.0	=	135.0	19 - mg/L	0	12/30 - Twelve Per Month WH/DS - When Discharging	CP - COMPOS CP - COMPOS
					Permit Req.							Req Mon MO AVG		Req Mon MX WK AV	19 - mg/L			
					Value NODI													
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	--	Sample						=	9.2	=	12.7	19 - mg/L	0	12/30 - Twelve Per Month WH/DS - When Discharging	CP - COMPOS CP - COMPOS
					Permit Req.							Req Mon MO AVG		Req Mon MX WK AV	19 - mg/L			
					Value NODI													
00610	Nitrogen, ammonia total [as N]	F - Primary/Preliminary Process Complete	0	--	Sample						=	10.9	=	11.8	19 - mg/L	0	12/30 - Twelve Per Month WH/DS - When Discharging	CP - COMPOS CP - COMPOS
					Permit Req.							Req Mon MO AVG		Req Mon MX WK AV	19 - mg/L			
					Value NODI													
50050	Flow, in conduit or thru treatment plant	F - Primary/Preliminary Process Complete	0	--	Sample	=	25.1	=	36.0	03 - MGD					0	12/30 - Twelve Per Month WH/DS - When Discharging	CN - CONTIN CN - CONTIN	
					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: kessel@louisvillemd.org  
 Name: John Kessel  
 E-Mail: kessel@louisvillemd.org  
 Date/Time: 2020-05-21 09:48 (Time Zone: -04:00)

**Report Last Signed By**  
 User: kessel@louisvillemd.org

Name: John Kessel  
E-Mail: kessel@louisvillemsd.org  
Date/Time: 2020-05-21 09:57 (Time Zone: -04:00)



KPDES #	Facility ID	Water Quality Treatment Center	Receiving Stream of Treatment Center	Region
KY0022411	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMHSewer Manhole	08935-SM	1001 BRECKENRIDGE LN		MIDDLE FORK BEARGRASS	STREAM

<u>Activity Code / Description</u>	<u>WO #</u>	<u>Ref No</u>	<u>Initiated</u>	<u>Initiated By</u>	<u>Assigned To</u>	<u>Disch Status</u>	<u>Event Date</u>	<u>Problem</u>	<u>Result</u>	<u>Completed</u>	<u>Condition</u>
: DISREV: RAIN EVENT DISCHARGE	3234714		04/13/2020	DAVIS BROWNMITCHELL		DOCUMENTE D	11/29/2001	LACK OF SYSTEM	UNAUTHORIZED DISCHARGE-	04/13/20 11:39 AM	MAIN

**Discharge Reporting:**

Discharge Amount:	44,123 GAL
Cause:	LACK OF SYSTEM CAPACITY HEAVY RAIN.
Clean Up:	NO CLEANUP REQUIRED, MANHOLE IS DISCHARGING DIRECTLY INTO CREEK.
Control Zone:	CONTROL ZONE WAS NOT ESTABLISHED DUE TO THE SIZE OF THE CREEK AND DIFFICULTY ACCESSING DISCHARGE AREAS.
Impact:	NONE OBSERVED OVER FLOW NOTIFICATION RECEIVED FROM REMOTE DISCHARGE ALARM.
Repair:	LOCATION INCLUDED IN THE IOAP.
Public Notification:	PUBLIC NOTIFIED THROUGH PERMANENT OVER FLOW SIGNS TO AVOID DISCHARGED CONTENT.

**Notifications:**

4/13/20 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
4/13/20 1:00 PM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION

<b>KPDES #</b>	<b>Facility ID</b>	<b>Water Quality Treatment Center</b>	<b>Receiving Stream of Treatment Center</b>	<b>Region</b>
KY0022411	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

<b>Facility Type</b>	<b>Facility ID</b>	<b>Facility Address</b>	<b>If Pump Station, Name of Pump Station:</b>	<b>Receiving Stream</b>	<b>Discharge to</b>
SMHSewer Manhole	28413	3317 DELL RD		CHENOWETH RUN	GROUND

<u>Activity Code / Description</u>	<u>WO #</u>	<u>Ref No</u>	<u>Initiated</u>	<u>Initiated By</u>	<u>Assigned To</u>	<u>Disch Status</u>	<u>Event Date</u>	<u>Problem</u>	<u>Result</u>	<u>Completed</u>	<u>Condition</u>
: DISREV: RAIN EVENT DISCHARGE	3234916		04/13/2020	DAVIS BROWNMITCHELL		DOCUMENTE D	03/20/2002	LACK OF SYSTEM	UNAUTHORIZED DISCHARGE-	04/13/20 11:11 AM	MAIN

**Discharge Reporting:**

Discharge Amount:	3,000 GAL
Cause:	LACK OF SYSTEM CAPACITY HEAVY RAIN.
Clean Up:	WO#3235008
Control Zone:	TEMPORARY DISCHARGE SIGNS, AND BARRICADE PLACED AROUND THE IMPACTED AREA.
Impact:	MANHOLE DISCHARGING.
Repair:	LOCATION INCLUDED IN IOAP.
Public Notification:	PUBLIC NOTIFIED THROUGH DOOR HANGERS AND TEMP DISCHARGE SIGNS TO AVOID DISCHARGED CONTENT.

**Notifications:**

4/13/20 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
4/13/20 1:00 PM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION

<b>KPDES #</b>	<b>Facility ID</b>	<b>Water Quality Treatment Center</b>	<b>Receiving Stream of Treatment Center</b>	<b>Region</b>
KY0022411	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

<b>Facility Type</b>	<b>Facility ID</b>	<b>Facility Address</b>	<b>If Pump Station, Name of Pump Station:</b>	<b>Receiving Stream</b>	<b>Discharge to</b>
SMHSewer Manhole	28414	3400 DELL RD		CHENOWETH RUN	GROUND

Activity Code / Description	WO #	Ref No	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
: DISREV: RAIN EVENT DISCHARGE	3234918		04/13/2020	DAVIS BROWNMITCHELL		DOCUMENTE D	01/03/2005	LACK OF SYSTEM	UNAUTHORIZED DISCHARGE-	04/13/00 11:12 AM	MAIN

**Discharge Reporting:**

Discharge Amount:	3,000 GAL
Cause:	LACK OF SYSTEM CAPACITY HEAVY RAIN.
Clean Up:	WO#3235009
Control Zone:	TEMPORARY DISCHARGE SIGNS, AND BARRICADE PLACED AROUND THE IMPACTED AREA.
Impact:	MANHOLE DISCHARGING.
Repair:	LOCATION INCLUDED IN IOAP.
Public Notification:	PUBLIC NOTIFIED THROUGH DOOR HANGERS AND TEMP DISCHARGE SIGNS TO AVOID DISCHARGED CONTENT.

**Notifications:**

4/13/20 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
4/13/20 1:00 PM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION



<b>KPDES #</b>	<b>Facility ID</b>	<b>Water Quality Treatment Center</b>	<b>Receiving Stream of Treatment Center</b>	<b>Region</b>
KY0022411	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

Facility Type	Facility ID	Facility Address	If Pump Station, Name of Pump Station:	Receiving Stream	Discharge to
SMHSewer Manhole	28415	3406 DELL RD		CHENOWETH RUN	GROUND

Activity Code / Description	WO #	Ref No	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
: DISREV: RAIN EVENT DISCHARGE	3234919		04/13/2020	DAVIS BROWNMITCHELL		DOCUMENTE D	12/19/2002	LACK OF SYSTEM	UNAUTHORIZED DISCHARGE-	04/13/20 11:13 AM	MAIN

**Discharge Reporting:**

Discharge Amount:	3,000 GAL
Cause:	LACK OF SYSTEM CAPACITY HEAVY RAIN.
Clean Up:	WO#3235010
Control Zone:	TEMPORARY DISCHARGE SIGNS, AND BARRICADE PLACED AROUND THE IMPACTED AREA.
Impact:	MANHOLE DISCHARGING.
Repair:	LOCATION INCLUDED IN IOAP.
Public Notification:	PUBLIC NOTIFIED THROUGH DOOR HANGERS AND TEMP DISCHARGE SIGNS TO AVOID DISCHARGED CONTENT.

**Notifications:**

4/13/20 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
4/13/20 1:00 PM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION

<b>KPDES #</b>	<b>Facility ID</b>	<b>Water Quality Treatment Center</b>	<b>Receiving Stream of Treatment Center</b>	<b>Region</b>
KY0022411	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

<b>Facility Type</b>	<b>Facility ID</b>	<b>Facility Address</b>	<b>If Pump Station, Name of Pump Station:</b>	<b>Receiving Stream</b>	<b>Discharge to</b>
SMHSewer Manhole	28451	3406 CHARLANE PKY		CHENOWETH RUN	GROUND

<u>Activity Code / Description</u>	<u>WO #</u>	<u>Ref No</u>	<u>Initiated</u>	<u>Initiated By</u>	<u>Assigned To</u>	<u>Disch Status</u>	<u>Event Date</u>	<u>Problem</u>	<u>Result</u>	<u>Completed</u>	<u>Condition</u>
: DISREV: RAIN EVENT DISCHARGE	3234924		04/13/2020	DAVIS BROWNMITCHELL		DOCUMENTE D	10/28/2015	LACK OF SYSTEM	UNAUTHORIZED DISCHARGE-	04/13/20 12:00 PM	MAIN

**Discharge Reporting:**

Discharge Amount:	3,500 GAL
Cause:	LACK OF SYSTEM CAPACITY HEAVY RAIN.
Clean Up:	WO#3235011
Control Zone:	SECURED IMPACTED AREA WITH BARRICADE & TEMP SIGN.
Impact:	MANHOLE DISCHARGING.
Repair:	LOCATION INCLUDED IN IOAP.
Public Notification:	PUBLIC NOTIFIED THROUGH TEMP SIGNS AT DISCHARGE SITE AND DOOR HANGERS TO AVOID DISCHARGED CONTENT.

**Notifications:**

4/13/20 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
4/13/20 1:00 PM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION

<b>KPDES #</b>	<b>Facility ID</b>	<b>Water Quality Treatment Center</b>	<b>Receiving Stream of Treatment Center</b>	<b>Region</b>
KY0022411	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

<b>Facility Type</b>	<b>Facility ID</b>	<b>Facility Address</b>	<b>If Pump Station, Name of Pump Station:</b>	<b>Receiving Stream</b>	<b>Discharge to</b>
SMHSewer Manhole	28453	3402 CHARLANE PKY		CHENOWETH RUN	DITCH

Activity Code / Description	WO #	Ref No	Initiated	Initiated By	Assigned To	Disch Status	Event Date	Problem	Result	Completed	Condition
: DISREV: RAIN EVENT DISCHARGE	3234925		04/13/2020	DAVIS BROWNMITCHELL		DOCUMENTE D	10/28/2015	LACK OF SYSTEM	UNAUTHORIZED DISCHARGE-	04/13/20 01:10 PM	MAIN

**Discharge Reporting:**

Discharge Amount:	16,500 GAL
Cause:	LACK OF SYSTEM CAPACITY--HEAVY RAIN.
Clean Up:	WO#3235013
Control Zone:	SECURED IMPACTED AREA WITH BARRICADE & TEMP SIGN.
Impact:	MANHOLE DISCHARGING.
Repair:	LOCATION INCLUDED IN IOAP.
Public Notification:	PUBLIC NOTIFIED THROUGH TEMP SIGNS AT DISCHARGE SITE AND DOOR HANGERS TO AVOID DISCHARGED CONTENT.

**Notifications:**

4/13/20 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
4/13/20 1:00 PM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION

<b>KPDES #</b>	<b>Facility ID</b>	<b>Water Quality Treatment Center</b>	<b>Receiving Stream of Treatment Center</b>	<b>Region</b>
KY0022411	MSD0278	MORRIS FORMAN	OHIO RIVER	WEST

<b>Facility Type</b>	<b>Facility ID</b>	<b>Facility Address</b>	<b>If Pump Station, Name of Pump Station:</b>	<b>Receiving Stream</b>	<b>Discharge to</b>
SMHSewer Manhole	IS021A-SI	1201 OLD CANNONS LN		MIDDLE FORK BEARGRASS	STREAM

<u>Activity Code / Description</u>	<u>WO #</u>	<u>Ref No</u>	<u>Initiated</u>	<u>Initiated By</u>	<u>Assigned To</u>	<u>Disch Status</u>	<u>Event Date</u>	<u>Problem</u>	<u>Result</u>	<u>Completed</u>	<u>Condition</u>
: DISREV: RAIN EVENT DISCHARGE	3234703		04/13/2020	DAVIS BROWNMITCHELL		DOCUMENTE D	08/01/1969	LACK OF SYSTEM	UNAUTHORIZED DISCHARGE-	04/13/20 06:00 PM	MAIN

**Discharge Reporting:**

Discharge Amount:	2,100,000 GAL
Cause:	LACK OF SYSTEM CAPACITY: HEAVY RAIN.
Clean Up:	NO CLEANUP REQUIRED, MANHOLE IS DISCHARGING DIRECTLY INTO CREEK.
Control Zone:	CONTROL ZONE WAS NOT ESTABLISHED DUE TO THE SIZE OF THE CREEK AND DIFFICULTY ACCESSING DISCHARGE AREAS.
Impact:	NONE OBSERVED OVER FLOW NOTIFICATION RECEIVED FROM REMOTE DISCHARGE ALARM.
Repair:	LOCATION INCLUDED IN THE IOAP.
Public Notification:	PUBLIC NOTIFIED THROUGH PERMANENT OVER FLOW SIGNS TO AVOID DISCHARGED CONTENT.

**Notifications:**

4/13/20 1:00 PM	DISNOT	EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO:DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV
4/13/20 1:00 PM	DISSNO	WAITING TO COMPLETE THE DISCHARGE INFORMATION

**Total Facilities Printed: 7**

**Total Work Orders Printed: 7**

Format: Month/Day/Year  
 Enter Start Date : 4/1/20

MORRIS FORMAN WATER QUALITY TREATMENT CENTER JEFFERSON COUNTY, KENTUCKY MONTH OF April-20  
 KPDES PERMIT NO. KY0222411 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																													
4/1/20	81.42	81.42	0.00	59	59	7.2	6.7	5.4	0.1	202	9	7.8	203	109	6	25.7	13.0	11.1	20.6	6.8	5.8	380	57	0.87	0.38	1.59	0.016	4	17.0	24.0	
4/2/20	77.78	77.78	0.00	62	62	7.3	6.7	6.0	0.1	224	12	6.8	457	300	10	25.1	12.9	11.1	15.1	6.7	5.7	383	57	0.73	0.37	1.43	0.016	10	14.5	24.0	
4/3/20	79.89	79.89	0.00	62	62	7.1	6.5	6.0	0.1	228	65	6.2	350	220	24	25.0	12.6	10.9	9.2	4.2	3.6	467	91	0.45	0.37	1.43	0.016	12	9.6	24.0	
4/4/20	72.29	72.29	0.00	65	65	7.3	6.4	7.5	0.1	228	48	8.2	312	218	22	25.0	13.1	11.4	16.6	6.6	5.7	450	71	0.12	0.08	1.56	0.016	67	4.8	24.0	
4/5/20	67.74	67.74	0.00	65	65	7.1	6.7	7.9	0.1	196	44	6.6	160	113	24	25.1	12.6	11.0	21.4	5.5	4.8	471	86	0.36	0.06	1.56	0.016	17	10.3	24.0	
4/6/20	65.77	65.77	0.00	64	64	7.2	6.6	10.1	0.1	230	19	8.6	184	106	17	25.0	12.1	10.5	23.6	3.8	3.3	462	122	0.80	0.43	1.45	0.016	7	20.5	24.0	
4/7/20	63.99	63.99	0.00	65	65	7.0	6.6	9.1	0.1	294	44	7.2	272	154	24	24.5	11.6	10.1	22.5	6.6	5.8	458	69	0.58	0.45	1.15	0.016	34	22.8	11.0	
4/8/20	66.10	66.08	0.02	70	70	6.8	6.5	13.1	0.1	656	19	6.9	750	342	16	24.3	11.6	9.9	14.9	4.9	4.1	456	94	0.76	0.37	1.15	0.016	53	21.2	0.0	
4/9/20	99.26	88.76	10.48	65	65	7.1	6.3	13.1	0.1	464	80	8.3	355	210	46	24.2	12.6	10.7	12.7	3.4	2.9	397	116	0.86	0.41	1.69	0.016	167	11.0	0.0	
4/10/20	64.00	64.00	0.00	60	60	6.9	6.6	9.2	0.1	576	14	6.4	294	153	8	24.1	13.3	11.6	13.9	4.1	3.5	451	111	0.36	0.31	1.43	0.016	4	14.7	9.9	
4/11/20	59.77	59.77	0.00	65	65	7.4	6.6	7.5	0.1	168	11	6.4	221	142	6	24.3	13.6	11.4	21.0	4.9	4.1	488	99	0.00	0.17	1.43	0.016	34	17.6	24.0	
4/12/20	105.07	73.28	31.79	61	61	7.2	6.7	4.6	0.1	292	49	6.8	146	99	41	24.3	9.7	8.5	17.9	10.3	8.8	484	47	0.14	0.19	1.04	0.016	12	15.4	24.0	
4/13/20	217.64	129.20	88.44	58	58	7.2	6.8	3.5	0.5	167	112	6.8	108	46	71	24.3	12.2	10.3	16.7	2.0	1.6	196	99	0.56	0.30	5.07	0.016	32000	7.2	24.0	
4/14/20	140.07	131.33	8.74	59	59	7.0	6.8	3.4	0.1	162	44	3.8	264	211	94	24.3	11.6	9.7	11.2	3.4	2.9	223	64	0.66	0.36	5.07	0.016	5300	8.5	24.0	
4/15/20	96.37	96.37	0.00	58	58	7.1	6.6	6.5	0.1	226	15	5.3	256	166	11	24.1	12.4	10.4	13.7	2.6	2.2	293	110	0.69	0.42	1.75	0.016	222	7.9	24.0	
4/16/20	80.70	80.70	0.00	57	57	7.2	6.7	5.6	0.1	232	12	6.8	300	191	9	24.1	12.6	10.8	17.2	3.9	2.8	302	82	0.33	0.35	1.64	0.016	56	9.8	24.0	
4/17/20	103.93	90.02	13.91	59	59	7.0	6.8	9.0	0.1	342	21	7.4	517	255	28	24.1	12.1	10.3	13.3	3.2	2.7	306	96	0.38	0.29	2.07	0.016	9	11.8	24.0	
4/18/20	89.90	88.52	1.38	59	59	7.0	6.4	10.1	0.1	186	18	5.6	315	213	25	24.8	12.8	11.2	9.2	2.9	2.5	294	102	0.00	0.13	2.07	0.016	480	2.1	24.0	
4/19/20	72.13	72.13	0.00	60	60	7.2	6.4	8.1	0.1	202	10	5.6	430	272	17	24.5	13.1	11.6	9.6	3.8	3.3	439	115	0.38	0.08	1.89	0.016	100	1.2	24.0	
4/20/20	69.10	69.10	0.00	64	64	7.2	6.5	7.9	0.1	274	12	6.5	284	186	14	24.8	12.2	10.7	4.5	3.8	3.3	506	134	0.76	0.32	1.75	0.016	124	8.8	24.0	
4/21/20	66.18	66.18	0.00	63	63	7.0	6.6	8.6	0.1	360	11	6.4	405	240	7	24.9	11.4	9.9	15.9	3.6	3.1	493	138	0.50	0.37	1.29	0.016	12	16.4	24.0	
4/22/20	64.61	64.61	0.00	61	61	6.8	6.6	8.4	0.1	420	14	6.0	539	345	13	23.9	12.3	10.8	8.3	4.0	3.5	487	121	0.94	0.38	1.28	0.016	24	17.0	24.0	
4/23/20	174.15	105.46	68.69	63	63	6.9	6.5	10.1	0.6	348	136	4.1	442	337	96	24.4	11.6	10.3	10.5	4.1	3.6	408	99	0.49	0.47	4.33	0.016	120	13.1	24.0	
4/24/20	109.01	107.25	1.76	60	60	7.2	6.4	6.0	0.1	227	47	5.3	264	188	36	24.3	12.6	11.1	16.3	3.0	2.6	248	83	0.38	0.18	4.33	0.016	56	4.9	24.0	
4/25/20	110.38	95.46	14.92	62	62	7.0	6.5	6.0	0.1	257	62	5.5	285	225	35	24.2	13.6	11.8	11.4	6.4	5.6	426	66	0.00	0.10	2.30	0.016	272	2.8	24.0	
4/26/20	199.65	131.97	67.68	60	60	7.2	6.5	3.5	2.5	124	170	4.7	130	82	103	24.6	13.4	11.7	15.0	2.9	2.6	254	86	0.18	0.16	3.89	0.016	136	2.8	24.0	
4/27/20	103.83	103.83	0.00	62	62	7.2	6.6	5.5	0.1	206	31	6.4	317	168	27	24.6	13.0	11.3	11.6	3.7	3.2	298	80	0.59	0.36	3.89	0.016	290	7.1	24.0	
4/28/20	89.09	89.09	0.00	62	62	7.1	6.6	6.1	0.1	256	16	5.4	384	228	14	24.8	13.6	11.9	12.8	3.4	3.0	338	100	0.32	0.21	1.91	0.016	130	6.8	24.0	
4/29/20	98.44	96.15	2.29	62	62	7.1	6.5	11.1	0.3	372	112	6.4	430	260	60	24.7	12.5	10.9	8.6	4.4	3.9	347	81	0.50	0.51	2.51	0.016	1100	9.1	24.0	
4/30/20	92.09	92.09	0.00	61	61	7.2	6.5	8.1	0.3	250	94	4.6	256	163	46	24.8	12.9	11.4	12.8	3.4	2.9	342	101	0.61	0.44	2.51	0.016	120	9.7	24.0	
Sum	2871.35	2570.25	301.10													736.8								14.31	9.03					644.7	
Average	95.71	85.68	25.09	62	62	7.1	6.6	7.5	0.2	279	45	6.3	321	198	32	24.6	12.5	10.8	14.3	4.4	3.8	386	93	0.48	0.30	2.21	0.016	73	10.9		

SEWER CONNECTIONS 148131 TIMES 4 = 592524 SEWER POPULATION IND. WASTER POPULATION EQ  
 CUSTOMERS 388  
 FLOW 320205  
 BOD 927237  
 TSS 473047

Authorized Agent

Certification No. 26893

MORRIS FORMAN WASTEWATER TREATMENT PLANT JEFFERSON COUNTY, KY

Month of Apr-20

Average Flow

SETTLING TANKS	Primary	Secondary		
		Battery A	Battery B	Battery C
Average Flow (MGD)	95.84	23.81	27.47	10.43
Tanks in Service	4.00	7.0	7.0	4.0
Surface Area (Ft.2)	77000.00	51800.55	62391.61	34600.00
Volume (MG)	8.33	5.31	6.39	3.54
Weir Length (Ft.)	2860.00	2146.88	2585.83	1434.00
Avg. Weir Overflow (GPD/)	33509.28	11091.67	10623.61	7271.45
Avg. Settling Rate (GPD/Ft)	1244.63	657.31	600.57	426.09
Avg. Detention Time	2.09	5.35	5.58	8.16

AERATION TANKS

	Battery A	Battery B	Battery C
Volume (Gallons)	4200000	4200000	2100000
Avg. Flow (MGD)	34.05	37.47	14.74
Avg. Detention Time (Hours)	4.23	3.67	4.83

CHLORINE CONTACT CHAMBERS

Contact Chambers in Use	2.0
Volume (Gallons)	2340000
Avg. Detention Time (Hou)	1.18

Remarks: BY-PASS REPORTS (See Attached)