



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

July 21, 2016

Cheryl Edwards
Permit Support Section
Surface Water Permits Branch
Division of Water
300 Sower Boulevard – 3rd 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 June 1st to June 30th are provided through NetDMR.

Morris Forman WQTC did not meet the 7 day and 30 day Secondary Effluent TSS limits. All other permit requirements were met. MFWQTC continues to employ additional solids removal strategies to meet solids removal demands.

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

Sincerely,

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

vgt

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: | 001-1 MUNICIPAL DISCHARGE | | |

| | | | | | |
|----------------------------------|---------------------------|---------------|----------|---------|------------------|
| Report Dates & Status | | | | | |
| Monitoring Period: | From 06/01/16 to 06/30/16 | DMR Due Date: | 07/28/16 | 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: | James | Title: | Executive Director | Telephone: | 502-540-6000 |
| Last Name: | 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 | Units | | | | | |
| 00300 | Oxygen, dissolved [DO] | 1 - Effluent Gross | 0 | -- | Sample | | | | | = | 3.3 | | | | | 19 - mg/L | 0 | 01/01 - Daily | GR - GRAB | | | | | |
| | | | | | Permit Req. | | | | | >= | 2 INST MIN | | | | | 19 - mg/L | | 01/01 - Daily | GR - GRAB | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 00310 | BOD, 5-day, 20 deg. C | E - Secondary/Biological Process Complete | 0 | -- | Sample | = | 17013 | = | 23113 | 26 - lb/d | | = | 24 | = | 30 | 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 | | 01/01 - Daily | CP - COMPOS | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 00310 | BOD, 5-day, 20 deg. C | G - Raw Sewage Influent | 0 | -- | Sample | = | 298940 | = | 325291 | 26 - lb/d | | = | 408 | = | 515 | 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 | 01/01 - Daily | | CP - COMPOS | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | | | | | = | 6.3 | | | | 12 - SU | 0 | 01/01 - Daily | GR - GRAB | | | | | | |
| | | | | | Permit Req. | | | | | >= | 6 MINIMUM | | | <= | 9 MAXIMUM | | 12 - SU | 01/01 - Daily | GR - GRAB | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| X 00530 | Solids, total suspended | E - Secondary/Biological Process Complete | 0 | -- | Sample | = | 24847 | = | 42273 | 26 - lb/d | | = | 35 | = | 55 | 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 | | 01/01 - Daily | CP - COMPOS | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 00530 | Solids, total suspended | G - Raw Sewage Influent | 0 | -- | Sample | = | 278382 | = | 324258 | 26 - lb/d | | = | 378 | = | 463 | 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 | 01/01 - Daily | | CP - COMPOS | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | E - Secondary/Biological Process Complete | 0 | -- | Sample | = | 8138 | = | 10005 | 26 - lb/d | | = | 11.8 | = | 13.9 | 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 | | 01/01 - Daily | CP - COMPOS | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | G - Raw Sewage Influent | 0 | -- | Sample | = | 7537 | = | 7977 | 26 - lb/d | | = | 10.6 | = | 12 | 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 | 01/01 - Daily | | CP - COMPOS | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 50050 | Flow, in conduit or thru treatment plant | E - Secondary/Biological Process Complete | 0 | -- | Sample | = | 84.46 | = | 125.06 | 03 - MGD | | | | | | | 0 | 99/99 - Continuous | CN - CONTIN | | | | | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon DAILY MX | 03 - MGD | | | | | | | | 99/99 - Continuous | CN - CONTIN | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 50060 | Chlorine, total residual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | < | 0.012 | 19 - mg/L | 0 | 01/01 - Daily | GR - GRAB | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | <= | | 0.019 DAILY MX | 19 - mg/L | 01/01 - Daily | GR - GRAB | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 74055 | Coliform, fecal general | 1 - Effluent Gross | 1 | -- | Sample | | | | | | | | | = | 89 | 13 - #/100mL | 0 | 01/01 - Daily | GR - GRAB | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | <= | | 200 30DA GEO | <= | 400 7 DA GEO | 13 - #/100mL | 01/01 - Daily | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 81010 | BOD, 5-day, percent removal | K - Percent Removal | 0 | -- | Sample | | | | | = | 93 | | | | | 23 - % | 0 | 01/30 - Monthly | CA - CALCTD | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | >= | 85 MO MIN | 23 - % | 01/30 - Monthly | CA - CALCTD | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | |
| 81011 | Solids, suspended percent removal | K - Percent Removal | 0 | -- | Sample | | | | | = | 89 | | | | | 23 - % | 0 | 01/30 - Monthly | CA - CALCTD | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | >= | 85 MO MIN | 23 - % | 01/30 - Monthly | CA - CALCTD |
| | | | | | 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 | | | | | | |
|--------------------------|----------------|---------------------|-------|------|-------------|-------------|
| Code | Parameter Name | Monitoring Location | Field | Type | Description | Acknowledge |

| | | | | | | |
|-------|-------------------------|---|---|------|--|-----|
| 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. (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. (Error Code: 1) | Yes |

Comments

Attachments

| Name | Type | Size |
|--|------|--------|
| 201606MorrisFormanWQTCOverflowReport.pdf | pdf | 99434 |
| MFWQTCoverletter062016.pdf | pdf | 91058 |
| MFWQTCMOR062016.pdf | pdf | 255047 |

Report Last Saved By

Morris Forman WQTC MSD

| | | | |
|---------|-------------------------------|------------|--------------------------------------|
| User: | robin.burch@louisvillemsd.org | Date/Time: | 2016-07-21 12:48 (Time Zone: -04:00) |
| 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: | 700 W Liberty St Louisville, KY 40203 |
| Permitted Feature: | 001 External Outfall | Discharge: | 001-B SECONDARY BYPASS |
| Facility: | | Facility Location: | MORRIS FORMAN WQTC MSD 4522 ALGONQUIN PKWY LOUISVILLE, KY 40211 |

| | | | |
|----------------------------------|---------------------------|---------------|----------|
| Report Dates & Status | | | |
| Monitoring Period: | From 06/01/16 to 06/30/16 | DMR Due Date: | 07/28/16 |
| 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 | Title: | Executive Director |
| Last Name: | Parrott | 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 |
| 00310 | BOD, 5-day, 20 deg. C | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 52 | = | 83 | 19 - mg/L | 14/30 - 14 Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | |
| | | | | | Permit Req. | | | | | | | | | | Req Mon MO AVG | | | Req Mon MX WK AV |
| | | | | | Value NODI | | | | | | | | | | | | | |
| 00310 | BOD, 5-day, 20 deg. C | F - Primary/Preliminary Process Complete | 0 | -- | Sample | | | | | | = | 302 | = | 407 | 19 - mg/L | 14/30 - 14 Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | |
| | | | | | Permit Req. | | | | | | | | | | Req Mon MO AVG | | | Req Mon MX WK AV |
| | | | | | Value NODI | | | | | | | | | | | | | |
| 00530 | Solids, total suspended | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 65 | = | 113 | 19 - mg/L | 14/30 - 14 Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | |
| | | | | | Permit Req. | | | | | | | | | | Req Mon MO AVG | | | Req Mon MX WK AV |
| | | | | | Value NODI | | | | | | | | | | | | | |
| 00530 | Solids, total suspended | F - Primary/Preliminary Process Complete | 0 | -- | Sample | | | | | | = | 317 | = | 464 | 19 - mg/L | 14/30 - 14 Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | |
| | | | | | Permit Req. | | | | | | | | | | Req Mon MO AVG | | | Req Mon MX WK AV |
| | | | | | Value NODI | | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 11.8 | = | 12.9 | 19 - mg/L | 14/30 - 14 Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | |
| | | | | | Permit Req. | | | | | | | | | | Req Mon MO AVG | | | Req Mon MX WK AV |
| | | | | | Value NODI | | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | F - Primary/Preliminary Process Complete | 0 | -- | Sample | | | | | | = | 17.5 | = | 20 | 19 - mg/L | 14/30 - 14 Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | |
| | | | | | Permit Req. | | | | | | | | | | Req Mon MO AVG | | | Req Mon MX WK AV |
| | | | | | Value NODI | | | | | | | | | | | | | |
| 50050 | Flow, in conduit or thru treatment plant | F - Primary/Preliminary Process Complete | 0 | -- | Sample | = | 7.39 | = | 9.24 | 03 - MGD | | | | | 14/30 - 14 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: | robin.burch@louisvillemtd.org | Date/Time: | 2016-07-21 12:48 (Time Zone: -04:00) |
| Name: | Robin Burch | | |
| E-Mail: | robin.burch@louisvillemtd.org | | |

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-Y BIOMONITORING/ONCE PER QUARTER | |

Report Dates & Status

| | | |
|---|-------------------------------|---------------------------------|
| Monitoring Period: From 04/01/16 to 06/30/16 | DMR Due Date: 07/28/16 | Status: NetDMR Validated |
|---|-------------------------------|---------------------------------|

Considerations for Form Completion

Principal Executive Officer

| | | |
|---------------------------|----------------------------------|--------------------------------|
| First Name: James | Title: Executive Director | Telephone: 502-540-6000 |
| Last Name: 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 | Units | | |
| 00900 | Hardness, total [as CaCO3] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 377 | | = | 377 | 19 - mg/L | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | |
| 01025 | Cadmium, dissolved [as Cd] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | < | 0.001 | | < | 0.001 | 19 - mg/L | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | |
| 01040 | Copper, dissolved [as Cu] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | < | 0.005 | | < | 0.005 | 19 - mg/L | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | |
| 01049 | Lead, dissolved [as Pb] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | < | 0.003 | | < | 0.003 | 19 - mg/L | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | |
| 01090 | Zinc, dissolved [as Zn] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | < | 0.009 | | < | 0.009 | 19 - mg/L | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | |
| 01094 | Zinc, total recoverable | 1 - Effluent Gross | 0 | -- | Sample | | | | | | < | 0.009 | | < | 0.009 | 19 - mg/L | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | |
| 01113 | Cadmium, total recoverable | 1 - Effluent Gross | 0 | -- | Sample | | | | | | < | 0.001 | | < | 0.001 | 19 - mg/L | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | |
| 01114 | Lead, total recoverable | 1 - Effluent Gross | 0 | -- | Sample | | | | | | < | 0.003 | | < | 0.003 | 19 - mg/L | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | |
| 01119 | Copper, total recoverable | 1 - Effluent Gross | 0 | -- | Sample | | | | | | < | 0.005 | | < | 0.005 | 19 - mg/L | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | |
| 61406 | Toxicity, final conc toxicity units | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | < | 1 | 2F - tox acute | 0 | 01/90 - Quarterly | CP - COMPOS | | |
| | | | | | Permit Req. | | | | | | | | | | | <= | 1 DAILY MX | 2F - tox acute | 0 | 01/90 - Quarterly | G2 - GRAB-2 |
| | | | | | 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: 2016-07-21 12:48 (Time Zone: -04:00)

Name: Robin Burch

E-Mail: robin.burch@louisvillemsd.org

Format: Month/Day/Year
 Enter Start Date : 6/1/16 Press (Ctrl r) to recalculate spreadsheet.

MORRIS FORMAN WATER QUALITY TREATMENT CENTER JEFFERSON COUNTY, KENTUCKY MONTH OF June-16
 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 | | CHLORINATION | | | FINAL EFFLUENT | | | |
|---------|---------------------------------------|----------|--------|----------------|-------|-----|-------|--------------|-------|-----|---------------|-----|----------------|-----|-------|---------------------|-------|-------|---------------|-------|------------|------------|----------------|--------------|-------------|--------------|--------|-------|--------------|-------------------------|-----------------------------|----------------|-------------------------------|---------------|---------------|
| | Final | Sec. | Bypass | raw | final | raw | final | raw | final | raw | final | raw | final | raw | final | raw | final | prim. | final | final | FLOW MG | TSS g/L | TVSS g/L | D.O. mg/L | MLSS g/L | MLVSS g/L | SET | SVI | Wasted MG | Primary Sludge MG | Chlorine Doseage KLBS | Resid mg/L | Fecal Coliform #/100 ml | NH3-N mg/L | Pump Hours |
| | Effluent | Effluent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6/1/16 | 78.95 | 78.95 | 0.00 | 74 | 74 | 7.2 | 6.9 | 5.5 | 0.1 | 260 | 12 | 6.4 | 221 | 158 | 10 | 28.7 | 13.5 | 11.4 | 13.2 | 3.5 | 2.9 | 238 | 67 | 1.52 | 0.32 | 1.81 | 0.012 | 4 | 25 | 0.0 | | | | | |
| 6/2/16 | 117.14 | 96.48 | 20.66 | 72 | 72 | 7.1 | 6.7 | 8.0 | 3.0 | 384 | 98 | 6.5 | 286 | 193 | 68 | 28.6 | 11.7 | 9.7 | 13.7 | 3.1 | 2.6 | 227 | 71 | 1.44 | 0.30 | 3.34 | 0.012 | 11 | 18 | 0.0 | | | | | |
| 6/3/16 | 96.62 | 91.24 | 5.38 | 72 | 72 | 7.2 | 6.7 | 16.0 | 0.4 | 496 | 12 | 6.2 | 415 | 179 | 13 | 29.0 | 14.1 | 11.6 | 13.5 | 3.4 | 2.8 | 226 | 66 | 1.32 | 0.27 | 2.62 | 0.012 | 140 | 13 | 0.0 | | | | | |
| 6/4/16 | 113.17 | 97.81 | 15.36 | 72 | 72 | 7.1 | 6.7 | 19.0 | 2.5 | 452 | 73 | 5.2 | 545 | 333 | 70 | 29.3 | 11.7 | 9.6 | 10.9 | 4.4 | 3.7 | 304 | 69 | 1.35 | 0.30 | 4.06 | 0.012 | 144 | 12 | 0.0 | | | | | |
| 6/5/16 | 87.84 | 84.01 | 3.83 | 71 | 71 | 7.3 | 6.6 | 16.0 | 0.4 | 404 | 44 | 5.4 | 387 | 210 | 44 | 29.2 | 13.3 | 11.2 | 10.9 | 3.8 | 3.2 | 293 | 76 | 1.39 | 0.35 | 6.07 | 0.012 | 2950 | 7 | 0.0 | | | | | |
| 6/6/16 | 78.43 | 78.43 | 0.00 | 74 | 74 | 7.2 | 6.7 | 17.0 | 0.4 | 424 | 22 | 6.8 | 502 | 417 | 25 | 29.1 | 12.6 | 10.8 | 10.6 | 3.3 | 2.7 | 292 | 85 | 1.46 | 0.33 | 2.73 | 0.012 | 190 | 12 | 0.0 | | | | | |
| 6/7/16 | 83.97 | 83.13 | 0.84 | 71 | 71 | 7.3 | 6.7 | 18.0 | 0.4 | 468 | 35 | 5.1 | 461 | 301 | 33 | 29.6 | 15.0 | 12.3 | 10.7 | 4.7 | 3.8 | 314 | 67 | 1.55 | 0.17 | 2.54 | 0.012 | 174 | 14 | 0.0 | | | | | |
| 6/8/16 | 71.87 | 71.87 | 0.00 | 69 | 69 | 7.2 | 6.7 | 15.0 | 0.1 | 496 | 26 | 5.3 | 535 | 459 | 22 | 29.7 | 13.9 | 11.9 | 10.0 | 3.9 | 3.2 | 352 | 94 | 1.59 | 0.19 | 2.53 | 0.012 | 145 | 17 | 0.0 | | | | | |
| 6/9/16 | 64.72 | 64.72 | 0.00 | 74 | 74 | 7.0 | 6.8 | 13.0 | 0.2 | 444 | 43 | 4.6 | 656 | 550 | 63 | 29.6 | 14.7 | 12.2 | 9.2 | 3.6 | 3.1 | 347 | 99 | 1.50 | 0.19 | 2.18 | 0.012 | 550 | 17 | 0.0 | | | | | |
| 6/10/16 | 67.93 | 67.93 | 0.00 | 74 | 74 | 6.9 | 6.6 | 21.0 | 0.3 | 592 | 44 | 3.3 | 708 | 448 | 61 | 28.1 | 14.1 | 11.9 | 8.4 | 4.2 | 3.7 | 320 | 75 | 1.58 | 0.24 | 3.51 | 0.012 | 60 | 14 | 0.0 | | | | | |
| 6/11/16 | 64.49 | 64.49 | 0.00 | 77 | 77 | 7.1 | 6.5 | 20.0 | 0.2 | 492 | 36 | 4.8 | 514 | 343 | 36 | 26.3 | 17.8 | 15.1 | 8.6 | 4.5 | 3.8 | 299 | 67 | 1.57 | 0.25 | 2.63 | 0.012 | 76 | 11 | 0.0 | | | | | |
| 6/12/16 | 75.24 | 73.61 | 1.63 | 75 | 75 | 7.1 | 6.5 | 8.0 | 0.6 | 288 | 36 | 5.0 | 271 | 304 | 26 | 25.8 | 15.1 | 13.2 | 8.5 | 4.7 | 4.1 | 370 | 80 | 1.57 | 0.24 | 3.37 | 0.012 | 40 | 8 | 0.0 | | | | | |
| 6/13/16 | 93.63 | 91.92 | 1.71 | 76 | 76 | 7.1 | 6.5 | 7.5 | 0.1 | 264 | 30 | 4.6 | 314 | 242 | 22 | 26.2 | 17.5 | 15.6 | 11.8 | 4.0 | 3.6 | 209 | 52 | 1.52 | 0.25 | 2.95 | 0.012 | 32 | 11 | 0.0 | | | | | |
| 6/14/16 | 100.61 | 92.31 | 8.30 | 74 | 74 | 6.9 | 6.6 | 19.0 | 1.9 | 668 | 81 | 4.6 | 607 | 532 | 59 | 25.9 | 17.1 | 14.5 | 9.7 | 4.9 | 4.2 | 268 | 54 | 1.45 | 0.28 | 3.68 | 0.012 | 253 | 12 | 0.0 | | | | | |
| 6/15/16 | 143.73 | 125.06 | 18.67 | 73 | 73 | 7.1 | 6.5 | 10.0 | 1.5 | 276 | 62 | 4.5 | 524 | 138 | 30 | 24.7 | 18.1 | 13.9 | 14.4 | 3.3 | 2.7 | 219 | 66 | 1.27 | 0.25 | 3.79 | 0.012 | 255 | 7 | 0.0 | | | | | |
| 6/16/16 | 101.03 | 100.95 | 0.08 | 74 | 74 | 7.0 | 6.6 | 15.0 | 0.2 | 452 | 15 | 5.0 | 465 | 244 | 17 | 25.0 | 16.9 | 14.1 | 8.6 | 4.4 | 3.7 | 182 | 43 | 0.85 | 0.29 | 2.74 | 0.012 | 108 | 11 | 0.0 | | | | | |
| 6/17/16 | 84.67 | 84.67 | 0.00 | 72 | 72 | 6.9 | 6.6 | 8.0 | 0.1 | 292 | 24 | 5.1 | 459 | 478 | 17 | 25.9 | 16.7 | 14.5 | 8.4 | 4.1 | 3.5 | 303 | 75 | 1.29 | 0.31 | 2.20 | 0.012 | 96 | 10 | 0.0 | | | | | |
| 6/18/16 | 76.60 | 76.60 | 0.00 | 72 | 72 | 6.9 | 6.5 | 10.0 | 0.9 | 410 | 60 | 5.0 | 509 | 288 | 28 | 26.2 | 18.4 | 15.1 | 8.8 | 5.2 | 4.4 | 342 | 68 | 1.14 | 0.24 | 2.13 | 0.012 | 80 | 10 | 0.0 | | | | | |
| 6/19/16 | 70.90 | 70.90 | 0.00 | 75 | 75 | 7.1 | 6.5 | 10.0 | 0.8 | 242 | 38 | 5.1 | 252 | 302 | 20 | 25.6 | 17.1 | 14.0 | 11.0 | 5.3 | 4.5 | 394 | 71 | 1.27 | 0.24 | 2.19 | 0.012 | 36 | 15 | 0.0 | | | | | |
| 6/20/16 | 73.12 | 73.12 | 0.00 | 77 | 77 | 7.0 | 6.7 | 7.5 | 0.4 | 156 | 25 | 5.7 | 289 | 319 | 17 | 26.1 | 17.5 | 14.3 | 11.0 | 4.5 | 3.7 | 381 | 82 | 1.31 | 0.23 | 2.17 | 0.012 | 27 | 17 | 0.0 | | | | | |
| 6/21/16 | 74.78 | 74.78 | 0.00 | 78 | 78 | 6.9 | 6.5 | 11.0 | 0.4 | 316 | 22 | 6.2 | 411 | 554 | 18 | 27.3 | 17.2 | 15.0 | 8.7 | 6.5 | 5.7 | 351 | 52 | 1.39 | 0.24 | 2.79 | 0.012 | 26 | 19 | 0.0 | | | | | |
| 6/22/16 | 100.88 | 95.89 | 4.99 | 78 | 78 | 6.8 | 6.6 | 20.0 | 1.2 | 548 | 84 | 4.5 | 641 | 510 | 70 | 25.6 | 17.7 | 15.2 | 8.2 | 4.7 | 4.1 | 292 | 62 | 1.53 | 0.18 | 4.40 | 0.012 | 122 | 16 | 0.0 | | | | | |
| 6/23/16 | 106.95 | 98.10 | 8.85 | 78 | 78 | 7.1 | 6.6 | 13.0 | 4.5 | 356 | 158 | 4.1 | 385 | 378 | 142 | 23.3 | 19.2 | 16.3 | 7.8 | 5.6 | 4.8 | 396 | 67 | 1.54 | 0.09 | 5.35 | 0.012 | 510 | 10 | 0.0 | | | | | |
| 6/24/16 | 118.12 | 107.83 | 10.29 | 77 | 77 | 7.0 | 6.3 | 9.0 | 2.0 | 480 | 122 | 4.6 | 259 | 205 | 69 | 20.4 | 22.1 | 17.4 | 7.2 | 5.4 | 4.2 | 408 | 74 | 1.19 | 0.09 | 5.72 | 0.012 | 97 | 7 | 0.0 | | | | | |
| 6/25/16 | 80.36 | 80.36 | 0.00 | 76 | 76 | 7.2 | 6.6 | 11.0 | 0.2 | 376 | 20 | 5.0 | 326 | 325 | 21 | 20.1 | 21.4 | 17.7 | 8.1 | 6.1 | 5.2 | 477 | 77 | 1.42 | 0.08 | 2.26 | 0.012 | 141 | 8 | 10.3 | | | | | |
| 6/26/16 | 88.37 | 88.37 | 0.00 | 77 | 77 | 7.4 | 6.7 | 10.5 | 0.6 | 270 | 45 | 5.5 | 207 | 310 | 24 | 18.3 | 23.7 | 19.1 | 11.4 | 5.5 | 4.5 | 579 | 109 | 1.50 | 0.08 | 2.15 | 0.012 | 58 | 9 | 24.0 | | | | | |
| 6/27/16 | 99.29 | 96.80 | 2.49 | 77 | 77 | 7.4 | 6.7 | 5.5 | 1.8 | 152 | 88 | 5.4 | 201 | 207 | 50 | 13.8 | 19.3 | 15.7 | 15.0 | 4.4 | 3.6 | 289 | 65 | 1.56 | 0.10 | 2.38 | 0.012 | 141 | 16 | 24.0 | | | | | |
| 6/28/16 | 84.57 | 84.57 | 0.00 | 75 | 75 | 7.0 | 6.7 | 8.5 | 1.1 | 238 | 62 | 6.3 | 256 | 275 | 25 | 12.5 | 18.9 | 14.9 | 9.3 | 4.2 | 3.4 | 290 | 70 | 0.89 | 0.19 | 2.07 | 0.012 | 13 | 17 | 17.3 | | | | | |
| 6/29/16 | 76.06 | 76.06 | 0.00 | 75 | 75 | 7.1 | 6.7 | 12.5 | 0.1 | 328 | 26 | 5.6 | 338 | 299 | 14 | 12.4 | 17.0 | 13.3 | 9.8 | 4.6 | 3.6 | 297 | 64 | 1.55 | 0.26 | 2.66 | 0.012 | 60 | 16 | 0.0 | | | | | |
| 6/30/16 | 64.95 | 64.95 | 0.00 | 75 | 75 | 7.3 | 6.7 | 8.0 | 0.1 | 328 | 15 | 5.1 | 304 | 248 | 10 | 13.2 | 18.0 | 14.1 | 10.5 | 7.6 | 6.0 | 426 | 58 | 1.58 | 0.27 | 2.17 | 0.012 | 89 | 19 | 0.0 | | | | | |
| Total | 2637.1 | 2533.7 | 103.4 | | | | | | | | | | | | | 735.3 | | | | | | | | | | | 42.088 | 6.805 | | | | | 75.5 | | |
| Average | 87.9 | 84.5 | 7.4 | 74.5 | 74.5 | 7.1 | 6.6 | 12.4 | 0.9 | 376 | 49 | 5.2 | 408 | 325 | 37 | 24.5 | 16.7 | 13.9 | 10.3 | 4.6 | 3.8 | 323 | 71 | 1.40 | 0.23 | 3.04 | 0.012 | 89 | 13 | | | | | | |

SEWER CONNECTIONS 148898 TIMES 4 = 587592 SEWER POPULATION

IND. WASTER POPULATION EQ
 CUSTOMERS 365
 FLOW 249579
 BOD 1173024
 TSS 733404

Authorized Agent



Certification No. 5691

MORRIS FORMAN WASTEWATER TREATMENT PLANT

JEFFERSON COUNTY, KY

Month of Jun-16

Average Flow

| SETTLING TANKS | Primary | Secondary | | |
|------------------------------|----------|-----------|-----------|-----------|
| | | Battery A | Battery B | Battery C |
| Average Flow (MGD) | 87.90 | 29.07 | 23.56 | 10.68 |
| Tanks in Service | 4.00 | 6.0 | 7.4 | 4.0 |
| Surface Area (Ft.2) | 77000.00 | 51751.33 | 63848.11 | 34440.85 |
| Volume (MG) | 8.33 | 5.30 | 6.54 | 3.53 |
| Weir Length (Ft.) | 2860.00 | 2144.84 | 2646.19 | 1427.40 |
| Avg. Weir Overflow (GPD/Ft) | 30735.31 | 13554.13 | 8904.40 | 7484.00 |
| Avg. Settling Rate (GPD/Ft2) | 1141.60 | 697.88 | 544.74 | 486.36 |
| Avg. Detention Time | 2.27 | 4.38 | 6.66 | 7.93 |

AERATION TANKS

| | Battery A | Battery B | Battery C |
|-----------------------------|-----------|-----------|-----------|
| Volume (Gallons) | 4200000 | 4200000 | 2100000 |
| Avg. Flow (MGD) | 36.12 | 34.78 | 16.75 |
| Avg. Detention Time (Hours) | 3.47 | 4.28 | 4.72 |

CHLORINE CONTACT CHAMBERS

| | |
|-----------------------------|---------|
| Contact Chambers in Use | 1.9 |
| Volume (Gallons) | 2239834 |
| Avg. Detention Time (Hours) | 0.92 |

Remarks: BY-PASS REPORTS (See Attached)

Louisville and Jefferson County
Metropolitan Sewer District
Wastewater Customer Count

Jun-16

| Plant Code | Service Area | | Residential Customers | | Commercial Customers | | Industrial Customers | | Metro Customers | | Multi Customers | | Total Customers | |
|--------------------|---|-----|-----------------------|-----------|----------------------|-----------|----------------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|-----------|
| | | | Actives | Inactives | Actives | Inactives | Actives | Inactives | Actives | Inactives | Actives | Inactives | Actives | Inactives |
| 140 | Derek Guthrie | LWC | 62,486 | 3,018 | 3,564 | 365 | 22 | 2 | 25 | 1 | 3 | 1 | 66,100 | 3,387 |
| 151 | Morris Forman - City | LWC | 68,147 | 11,133 | 8,898 | 1,601 | 249 | 64 | 237 | 11 | 1 | 25 | 77,532 | 12,834 |
| 152 | Morris Forman - County | LWC | 50,472 | 1,271 | 4,579 | 484 | 48 | 4 | 33 | 0 | 0 | 6 | 55,132 | 1,765 |
| | | | 118,619 | 12,404 | 13,477 | 2,085 | 297 | 68 | 270 | 11 | 1 | 31 | 132,664 | 14,599 |
| 153 | Hite Creek | LWC | 9,819 | 175 | 597 | 32 | 8 | 0 | 0 | 0 | 0 | 0 | 10,424 | 207 |
| 235 | Glen Oaks - Sec. 5 Only (Hite Creek) | LWC | 266 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 267 | 1 |
| 237 | Cedar Creek | LWC | 16,991 | 254 | 1,055 | 59 | 9 | 0 | 3 | 0 | 5 | 0 | 18,063 | 313 |
| 244 | Moser Farm (Hite Creek) | LWC | 165 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165 | 1 |
| 294 | Floyds Fork | LWC | 8,247 | 88 | 363 | 15 | 1 | 0 | 2 | 0 | 0 | 0 | 8,613 | 103 |
| Sub-Total | | | 335,212 | 28,345 | 32,534 | 4,641 | 634 | 138 | 570 | 23 | 10 | 63 | 368,960 | 33,210 |
| Grand Total | | | 363,557 | | 37,175 | | 772 | | 593 | | 73 | | 402,170 | |

Submitted by: Adonis Henderson
Date: 7/1/2016

Report Selections: Period: 06/01/2016 00:00 thru 06/30/2016 23:59, treatment Plant: MSD0278 MORRIS FORMAN, Excluding PPI Excluding CSO Excluding LAT, Result: WUS, Act Code: DISDW, DISREV

| 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 |
|----------------|-------------|-----------------------|--|-----------------------------|--------------|
| SMN Sewer Main | 45800 | 2413 SPRING VALLEY LN | | MIDDLE FORK BEARGRASS CREEK | STREAM |

| Activity Code / Description | WO # | Ref No | Initiated | Initiated By | Assigned To | Disch Status | Event Date | Problem | Result | Completed | Condition |
|--------------------------------|---------|--------|------------|--------------|-------------|---------------------------|------------|--------------------|---------------------------------|-------------------|-----------|
| : DISDW: DRY WEATHER DISCHARGE | 2568161 | | 06/01/2016 | DODDS | DODDS | REPAIRED - ISSUE RESOLVED | 06/01/2016 | STRUCTURAL FAILURE | UNAUTHORIZED DISCHARGE - WATERS | 06/01/16 07:40 PM | |

Discharge Reporting:

| | |
|----------------------|--|
| Discharge Amount: | 3,000 GAL |
| Cause: | STRUCTURAL FAILURE OF MAIN SEWER. CONTRACTOR CLEANING MAIN IN PREPARATION FOR LINING, OBSERVED SEWAGE IN CREEK AND STOPPED CLEANING IMMEDIATELY. |
| Clean Up: | NO CLEANUP PERFORMED, PIPE DISCHARGING DIRECTLY TO STREAM. |
| Control Zone: | PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA. |
| Impact: | DISCOLORATION OF STREAM. |
| Repair: | MAIN PLUGGED AND FLOW PUMPED TO NEXT MANHOLE. LINING SCHEDULED TO OCCUR WITHIN 48 HOURS. |
| Public Notification: | PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA. |

Notifications:

| | | |
|-----------------|--------|---|
| 5/21/16 1:00 am | DISNOT | EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO 'DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV' |
|-----------------|--------|---|

Report Selections: Period: 06/01/2016 00:00 thru 06/30/2016 23:59, treatment Plant: MSD0278 MORRIS FORMAN, Excluding PPI Excluding CSO Excluding LAT, Result: WUS, Act Code: DISDW, DISREV

| KPDES # | Facility ID | Water Quality Treatment Center | | | | Receiving Stream of Treatment Center | | | | Region | |
|---------------------------------|-------------|--------------------------------|-----------------------|--------------|-------------|--------------------------------------|------------|-----------------------|------------------------------------|----------------------|-----------|
| KY0022411 (Cont'd) | MSD0278 | MORRIS FORMAN | | | | OHIO RIVER | | | | WEST | |
| Activity Code / Description | WO # | Ref No | Initiated | Initiated By | Assigned To | Disch Status | Event Date | Problem | Result | Completed | Condition |
| : DISREVRain EVENT DISCHARGE | 2568618 | | 6/2/2016 4:30:00PM | DODDS | DODDS | REPAIRED - ISSUE RESOLVED | 06/01/2016 | STRUCTURAL FAILURE | UNAUTHORIZED DISCHARGE - WATERS | 06/02/16 06:00 PM | |

Discharge Reporting:

| | |
|----------------------|--|
| Discharge Amount: | 1,800 GAL |
| Cause: | FLOW DIVERSION SET UP FOR LINING REMOVED TO PREVENT OVERFLOW AT MANHOLE. |
| Clean Up: | NO CLEANUP PERFORMED, PIPE DISCHARGING DIRECTLY TO STREAM. |
| Control Zone: | PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA. |
| Impact: | NONE OBSERVED. |
| Repair: | LINING SCHEDULED TO OCCUR WITHIN 24 HOURS. |
| Public Notification: | PLACED TEMPORARY SIGNS AROUND THE IMPACTED AREA. |

Notifications:

| | | |
|----------------|--------|---|
| 6/2/16 1:00 am | DISNOT | EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO 'DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV' |
| 6/2/16 1:00 am | DISSNO | SUPPLEMENTAL EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE HAS BEEN SENT TO 'DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV' |

Total Facilities Printed: 1

Total Work Orders Printed: 2