



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

May 26, 2016

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 April 1st to April 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

vg

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 04/01/16 to 04/30/16 | DMR Due Date: | 05/28/16 | 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 A | 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 | | | | | = | 4.7 | | | | | 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 | = | 20767 | = | 31343 | 26 - lb/d | = | 26 | = | 39 | 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 | = | 328062 | = | 349557 | 26 - lb/d | = | 398 | = | 507 | 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 | | | | | = | 6.4 | | | = | 6.9 | 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 | = | 29826 | = | 56495 | 26 - lb/d | = | 37 | = | 68 | 19 - mg/L | 0 | 01/02 - Once Every 2 Days | 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 | = | 337135 | = | 356886 | 26 - lb/d | = | 405 | = | 467 | 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 | = | 8429 | = | 9479 | 26 - lb/d | = | 11 | = | 13.8 | 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 | 01/01 - Daily | CP - COMPOS | | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | G - Raw Sewage Influent | 0 | -- | Sample | = | 8728 | = | 9530 | 26 - lb/d | = | 10.8 | = | 12.1 | 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 | = | 94.53 | = | 134.11 | 03 - MGD | | | | | | 0 | 09/99 - See Permit | 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 | 2 | -- | Sample | | | | | | | | = | 94 | = | 133 | 13 - #/100mL | 0 | 01/01 - Daily | GR - GRAB | | | |
| | | | | | Permit Req. | | | | | | | | | | | <= | 1000 30DA GEO | | <= | 2000 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 | | | | | = | 90 | | | | | 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 |
|---|------|--------|
| 2016_04_MorrisForman_OverflowReport.pdf | pdf | 101483 |
| MFWQTC042016MOR.pdf | pdf | 246068 |
| April2016DMRCoverletter.pdf | pdf | 45304 |

Report Last Saved By

Morris Forman WQTC MSD

| | | | |
|---------|-------------------------------|------------|--------------------------------------|
| User: | robin.burch@louisvillemsd.org | Date/Time: | 2016-06-03 13:49 (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 04/01/16 to 04/30/16 | DMR Due Date: | 05/28/16 |
| 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 A | 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 | Units | | | | |
| 00310 | BOD, 5-day, 20 deg. C | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 82 | | = | 115 | 19 - mg/L | 09/30 - Nine Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | Req Mon MO AVG | | | Req Mon MX WK AV | 19 - mg/L 0 | | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | |
| 00310 | BOD, 5-day, 20 deg. C | F - Primary/Preliminary Process Complete | 0 | -- | Sample | | | | | | = | 232 | | = | 374 | 19 - mg/L | 09/30 - Nine Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | Req Mon MO AVG | Req Mon MX WK AV | 19 - mg/L 0 | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | |
| 00530 | Solids, total suspended | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 134 | | = | 161 | 19 - mg/L | 09/30 - Nine Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | Req Mon MO AVG | Req Mon MX WK AV | 19 - mg/L 0 | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | |
| 00530 | Solids, total suspended | F - Primary/Preliminary Process Complete | 0 | -- | Sample | | | | | | = | 239 | | = | 332 | 19 - mg/L | 09/30 - Nine Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | Req Mon MO AVG | Req Mon MX WK AV | 19 - mg/L 0 |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 11.1 | | = | 17.1 | 19 - mg/L | 09/30 - Nine Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | Req Mon MO AVG | Req Mon MX WK AV | 19 - mg/L 0 |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | F - Primary/Preliminary Process Complete | 0 | -- | Sample | | | | | | = | 15.6 | | = | 20.7 | 19 - mg/L | 09/30 - Nine Per Month WH/DS - When Discharging | CP - COMPOS CP - COMPOS | | | | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | Req Mon MO AVG | Req Mon MX WK AV | 19 - mg/L 0 |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | |
| 50050 | Flow, in conduit or thru treatment plant | F - Primary/Preliminary Process Complete | 0 | -- | Sample | = | 27.93 | = | 24.09 | 03 - MGD | | | | | | | 09/30 - Nine 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@louisvillemisd.org | Date/Time: | 2016-06-03 13:49 (Time Zone: -04:00) |
| Name: | Robin Burch | | |
| E-Mail: | robin.burch@louisvillemisd.org | | |

Format: Month/Day/Year
 Enter Start Date: 4/1/16

Press (Ctrl r) to recalculate spreadsheet.

MORRIS FORMAN WATER QUALITY TREATMENT CENTER JEFFERSON COUNTY, KENTUCKY MONTH OF April-16
 KPDEB 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 | Effluent | Bypass | raw | final | raw | final | raw | final | raw | final | raw | final | raw | final | prim. | FLOW | TSS | TVSS | D.O. | MLSS | MLVSS | SET | SVI | Sludge | Primary | Chlorine | Dosage | Resid | Fecal | Coliform | NH3-N | Pump. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4/1/16 | 175.55 | 134.11 | 41.44 | 61 | 61 | 7.5 | 6.8 | 10.0 | 0.4 | 220 | 58 | 7.2 | 273 | 134 | 30 | 32.0 | 13.4 | 10.9 | 13.2 | 2.6 | 2.2 | 232 | 90 | 1.46 | 0.24 | 5.19 | 0.012 | 330 | 5 | 0.0 | | | |
| 4/2/16 | 112.04 | 112.04 | 0.00 | 58 | 58 | 7.1 | 6.9 | 11.0 | 10.1 | 260 | 20 | 8.3 | 248 | 140 | 16 | 31.5 | 12.1 | 10.3 | 13.0 | 2.3 | 2.0 | 243 | 104 | 1.44 | 0.28 | 3.58 | 0.012 | 59 | 8 | 0.0 | | | |
| 4/3/16 | 91.39 | 91.39 | 0.00 | 59 | 59 | 7.3 | 6.8 | 11.0 | 0.1 | 284 | 12 | 8.1 | 247 | 208 | 12 | 31.0 | 11.4 | 8.3 | 14.0 | 2.3 | 2.2 | 191 | 82 | 1.44 | 0.34 | 1.32 | 0.012 | 31 | 12 | 0.0 | | | |
| 4/4/16 | 101.04 | 101.04 | 0.00 | 62 | 62 | 7.3 | 6.9 | 15.0 | 0.1 | 580 | 15 | 7.4 | 347 | 302 | 16 | 31.0 | 10.4 | 9.3 | 12.0 | 2.3 | 2.2 | 194 | 85 | 1.44 | 0.49 | 1.50 | 0.012 | 100 | 12 | 0.0 | | | |
| 4/5/16 | 101.03 | 101.03 | 0.00 | 60 | 60 | 7.4 | 6.9 | 17.0 | 0.1 | 356 | 20 | 6.4 | 346 | 150 | 14 | 31.2 | 11.4 | 9.4 | 11.0 | 2.8 | 2.2 | 191 | 69 | 1.44 | 0.47 | 1.93 | 0.012 | 123 | 13 | 0.0 | | | |
| 4/6/16 | 102.79 | 102.79 | 0.00 | 60 | 60 | 7.4 | 6.8 | 16.0 | 0.1 | 362 | 18 | 5.6 | 426 | 238 | 14 | 31.1 | 11.1 | 9.6 | 10.5 | 2.5 | 2.1 | 202 | 81 | 1.44 | 0.44 | 2.01 | 0.012 | 50 | 15 | 0.0 | | | |
| 4/7/16 | 97.53 | 97.53 | 0.00 | 60 | 60 | 7.3 | 6.9 | 14.0 | 0.1 | 376 | 22 | 5.4 | 459 | 347 | 26 | 30.3 | 10.4 | 8.9 | 10.1 | 2.9 | 2.5 | 218 | 76 | 1.44 | 0.51 | 2.32 | 0.012 | 128 | 13 | 0.0 | | | |
| 4/8/16 | 90.53 | 90.53 | 0.00 | 60 | 60 | 7.2 | 6.8 | 15.0 | 0.2 | 404 | 29 | 6.2 | 674 | 376 | 30 | 30.3 | 12.5 | 10.6 | 10.9 | 3.1 | 2.7 | 267 | 85 | 1.50 | 0.43 | 2.65 | 0.012 | 395 | 13 | 0.0 | | | |
| 4/9/16 | 81.17 | 81.17 | 0.00 | 58 | 58 | 7.2 | 6.8 | 14.8 | 0.1 | 324 | 24 | 6.2 | 306 | 200 | 18 | 31.4 | 13.2 | 11.2 | 9.9 | 3.3 | 2.8 | 290 | 97 | 1.55 | 0.31 | 2.22 | 0.012 | 80 | 10 | 0.0 | | | |
| 4/10/16 | 83.62 | 83.62 | 0.00 | 59 | 59 | 7.4 | 6.7 | 21.0 | 0.1 | 416 | 16 | 5.7 | 328 | 229 | 13 | 31.7 | 12.8 | 10.9 | 11.5 | 3.0 | 2.7 | 297 | 97 | 1.55 | 0.44 | 1.57 | 0.012 | 43 | 12 | 0.0 | | | |
| 4/11/16 | 132.68 | 104.09 | 28.59 | 62 | 62 | 7.4 | 6.8 | 20.0 | 5.0 | 744 | 130 | 6.3 | 379 | 422 | 101 | 31.3 | 11.6 | 9.9 | 13.4 | 3.4 | 2.9 | 330 | 97 | 1.55 | 0.46 | 3.61 | 0.012 | 23 | 130 | 0.0 | | | |
| 4/12/16 | 132.13 | 116.79 | 15.34 | 59 | 59 | 7.2 | 6.7 | 13.0 | 0.1 | 256 | 36 | 9.1 | 282 | 141 | 27 | 31.8 | 13.8 | 11.8 | 18.2 | 3.0 | 2.6 | 226 | 75 | 1.54 | 0.42 | 3.65 | 0.012 | 185 | 8 | 7.2 | | | |
| 4/13/16 | 100.03 | 100.03 | 0.00 | 59 | 59 | 7.4 | 6.8 | 15.0 | 0.1 | 280 | 10 | 6.9 | 412 | 113 | 10 | 32.1 | 13.8 | 11.5 | 17.6 | 3.5 | 3.0 | 261 | 74 | 1.57 | 0.51 | 1.86 | 0.012 | 103 | 12 | 24.0 | | | |
| 4/14/16 | 89.29 | 89.29 | 0.00 | 61 | 61 | 7.4 | 6.7 | 20.0 | 0.1 | 424 | 15 | 6.4 | 442 | 153 | 10 | 31.8 | 12.5 | 10.9 | 14.4 | 3.4 | 3.0 | 283 | 84 | 1.59 | 0.51 | 1.82 | 0.012 | 60 | 14 | 24.0 | | | |
| 4/15/16 | 87.73 | 87.73 | 0.00 | 63 | 63 | 7.1 | 6.8 | 19.0 | 0.3 | 452 | 18 | 7.5 | 547 | 265 | 15 | 32.1 | 11.0 | 9.7 | 13.7 | 3.6 | 3.2 | 24 | 67 | 1.59 | 0.46 | 1.85 | 0.012 | 88 | 14 | 24.0 | | | |
| 4/16/16 | 84.26 | 84.26 | 0.00 | 62 | 62 | 7.2 | 6.7 | 17.0 | 6.0 | 338 | 20 | 6.2 | 573 | 416 | 22 | 32.2 | 12.0 | 10.6 | 10.7 | 3.1 | 2.7 | 298 | 97 | 1.58 | 0.43 | 1.96 | 0.012 | 250 | 12 | 24.0 | | | |
| 4/17/16 | 78.27 | 78.27 | 0.00 | 65 | 65 | 7.3 | 6.6 | 17.0 | 0.1 | 372 | 17 | 5.6 | 379 | 228 | 16 | 32.2 | 13.1 | 11.4 | 13.1 | 4.0 | 3.5 | 303 | 76 | 1.49 | 0.47 | 1.90 | 0.012 | 55 | 11 | 20.3 | | | |
| 4/18/16 | 75.35 | 75.35 | 0.00 | 66 | 66 | 7.2 | 6.7 | 14.0 | 0.1 | 564 | 19 | 5.6 | 387 | 297 | 17 | 32.0 | 12.0 | 10.5 | 12.1 | 3.6 | 3.3 | 338 | 93 | 1.51 | 0.40 | 1.93 | 0.012 | 168 | 12 | 0.0 | | | |
| 4/19/16 | 74.63 | 74.63 | 0.00 | 68 | 68 | 7.1 | 6.8 | 20.0 | 0.2 | 508 | 20 | 6.3 | 686 | 373 | 14 | 31.1 | 12.6 | 10.9 | 13.2 | 3.8 | 3.3 | 369 | 97 | 1.52 | 0.40 | 1.81 | 0.012 | 167 | 16 | 0.0 | | | |
| 4/20/16 | 63.59 | 63.59 | 0.00 | 70 | 70 | 7.1 | 6.7 | 16.0 | 0.1 | 532 | 20 | 5.4 | 445 | 268 | 15 | 31.6 | 14.6 | 12.8 | 12.0 | 5.3 | 4.7 | 376 | 71 | 1.47 | 0.53 | 1.79 | 0.012 | 203 | 16 | 0.0 | | | |
| 4/21/16 | 110.10 | 88.74 | 23.36 | 69 | 69 | 7.0 | 6.6 | 17.0 | 3.5 | 500 | 156 | 4.9 | 534 | 374 | 115 | 32.8 | 13.7 | 12.2 | 11.5 | 4.7 | 4.3 | 428 | 92 | 1.51 | 0.47 | 3.02 | 0.012 | 107 | 17 | 0.0 | | | |
| 4/22/16 | 115.76 | 110.61 | 5.15 | 69 | 69 | 7.2 | 6.5 | 16.0 | 0.3 | 444 | 54 | 5.3 | 431 | 201 | 46 | 32.8 | 15.9 | 14.0 | 11.3 | 4.4 | 3.8 | 294 | 67 | 1.52 | 0.29 | 3.87 | 0.012 | 53 | 7 | 0.0 | | | |
| 4/23/16 | 82.36 | 82.36 | 0.00 | 65 | 65 | 7.3 | 6.9 | 13.9 | 0.1 | 400 | 12 | 6.5 | 396 | 254 | 9 | 33.0 | 15.1 | 13.6 | 12.0 | 3.9 | 3.5 | 431 | 110 | 1.48 | 0.20 | 1.87 | 0.012 | 78 | 9 | 0.0 | | | |
| 4/24/16 | 73.25 | 73.25 | 0.00 | 69 | 69 | 7.0 | 6.7 | 15.0 | 0.1 | 393 | 38 | 7.6 | 447 | 434 | 28 | 33.0 | 14.3 | 12.3 | 11.1 | 8.7 | 7.6 | 490 | 59 | 1.51 | 0.20 | 1.85 | 0.012 | 55 | 12 | 0.0 | | | |
| 4/25/16 | 76.58 | 76.58 | 0.00 | 68 | 68 | 7.4 | 6.4 | 20.0 | 0.1 | 600 | 38 | 5.1 | 343 | 427 | 38 | 32.6 | 15.3 | 13.6 | 11.7 | 5.1 | 4.6 | 416 | 82 | 1.53 | 0.39 | 1.89 | 0.012 | 164 | 14 | 0.0 | | | |
| 4/26/16 | 97.30 | 86.97 | 10.33 | 71 | 71 | 7.1 | 6.7 | 15.0 | 10.0 | 530 | 248 | 5.6 | 382 | 138 | 134 | 32.9 | 15.5 | 13.8 | 11.0 | 5.1 | 4.5 | 407 | 81 | 1.44 | 0.40 | 4.41 | 0.012 | 88 | 19 | 0.0 | | | |
| 4/27/16 | 165.55 | 116.75 | 48.80 | 73 | 73 | 7.2 | 6.5 | 10.0 | 7.0 | 312 | 220 | 5.2 | 188 | 143 | 115 | 33.3 | 15.5 | 13.4 | 11.3 | 3.9 | 3.4 | 291 | 74 | 1.58 | 0.26 | 8.41 | 0.012 | 4 | 10 | 0.0 | | | |
| 4/28/16 | 155.14 | 123.06 | 32.08 | 70 | 70 | 7.2 | 6.6 | 10.0 | 2.5 | 240 | 120 | 4.7 | 304 | 167 | 53 | 33.4 | 14.9 | 12.7 | 15.9 | 3.2 | 2.7 | 240 | 75 | 1.44 | 0.43 | 4.80 | 0.012 | 1330 | 8 | 0.0 | | | |
| 4/29/16 | 96.98 | 96.98 | 0.00 | 63 | 63 | 7.1 | 6.7 | 12.0 | 0.2 | 320 | 24 | 5.2 | 392 | 214 | 16 | 33.2 | 16.6 | 14.1 | 11.9 | 4.4 | 3.8 | 325 | 75 | 1.58 | 0.47 | 2.10 | 0.012 | 142 | 9 | 0.0 | | | |
| 4/30/16 | 159.55 | 113.31 | 46.24 | 70 | 70 | 7.2 | 6.7 | 11.0 | 7.0 | 340 | 180 | 6.9 | 334 | 187 | 113 | 32.5 | 18.7 | 15.8 | 12.9 | 5.2 | 4.4 | 307 | 60 | 1.68 | 0.35 | 5.87 | 0.012 | 53 | 11 | 0.0 | | | |
| Total | 3087.2 | 2835.9 | 251.3 | | | | | | | | | | | | | 959.4 | | | | | | | | 45.375 | 12.032 | | | | | 123.4 | | | |
| Average | 102.9 | 94.5 | 8.4 | 64.0 | 64.0 | 7.2 | 6.7 | 15.2 | 1.8 | 404 | 54 | 6.3 | 398 | 251 | 37 | 32.0 | 13.4 | 11.5 | 12.5 | 3.7 | 3.3 | 292 | 82 | 1.51 | 0.40 | 2.82 | 0.012 | 94 | 16 | | | | |

SEWER CONNECTIONS 146795 TIMES 4 = 587060 SEWER POPULATION
 IND. WASTER POPULATION EQ
 CUSTOMERS 361
 FLOW 393010
 BOD 1421743
 TSS 1065543

Authorized Agent



Certification No. 5891

Louisville and Jefferson County
Metropolitan Sewer District
Wastewater Customer Count

April-16

| <u>Plant Code</u> | <u>Service Area</u> | | <u>Residential Customers</u> | <u>Commercial Customers</u> | <u>Industrial Customers</u> | <u>Metro Customers</u> | <u>Multi Customers</u> | <u>Total Customers</u> |
|--------------------|---|-----|------------------------------|-----------------------------|-----------------------------|------------------------|------------------------|------------------------|
| 140 | Derek Guthrie | LWC | 65,088 | 3,917 | 23 | 26 | 4 | 69,058 |
| 151 | Morris Forman - City | LWC | 79,281 | 10,500 | 310 | 248 | 26 | 90,365 |
| 152 | Morris Forman - County | LWC | 51,937 | 5,047 | 51 | 33 | 1 | 57,069 |
| | | | 131,218 | 15,547 | 146765 | 361 | | |
| 153 | Hite Creek | LWC | 9,980 | 617 | 8 | 0 | 1 | 10,606 |
| 164 | McNeely Lake | LWC | 396 | 1 | 0 | 0 | 0 | 397 |
| 235 | Glen Oaks - Sec. 5 Only (Hite Creek) | LWC | 267 | 1 | 0 | 0 | 0 | 268 |
| 237 | Cedar Creek | LWC | 17,211 | 1,110 | 9 | 3 | 6 | 18,339 |
| 244 | Moser Farm (Hite Creek) | LWC | 166 | 0 | 0 | 0 | 0 | 166 |
| 294 | Floyds Fork | LWC | 8,453 | 390 | 1 | 3 | 0 | 8,847 |
| Grand Total | | | 363,997 | 37,130 | 763 | 313 | 38 | 255,115 |

Submitted by: Adonis Henderson
Date: 5/2/2016

MORRIS FORMAN WASTEWATER TREATMENT PLANT

JEFFERSON COUNTY, KY

Month of Apr-16

Average Flow

| SETTLING TANKS | Primary | Secondary | | |
|------------------------------|----------|-----------|-----------|-----------|
| | | Battery A | Battery B | Battery C |
| Average Flow (MGD) | 102.91 | 21.90 | 23.82 | 13.84 |
| Tanks in Service | 4.00 | 6.0 | 7.0 | 4.0 |
| Surface Area (Ft.2) | 77000.00 | 51900.00 | 60438.63 | 34600.00 |
| Volume (MG) | 8.33 | 5.32 | 6.19 | 3.54 |
| Weir Length (Ft.) | 2860.00 | 2151.00 | 2504.88 | 1434.00 |
| Avg. Weir Overflow (GPD/Ft) | 35981.59 | 10181.66 | 9509.63 | 9649.40 |
| Avg. Settling Rate (GPD/Ft2) | 1336.46 | 675.43 | 613.44 | 561.05 |
| Avg. Detention Time | 1.94 | 5.83 | 6.24 | 6.15 |

AERATION TANKS

| | Battery A | Battery B | Battery C |
|-----------------------------|-----------|-----------|-----------|
| Volume (Gallons) | 4200000 | 4200000 | 2100000 |
| Avg. Flow (MGD) | 35.05 | 37.08 | 19.41 |
| Avg. Detention Time (Hours) | 4.60 | 4.23 | 3.64 |

CHLORINE CONTACT CHAMBERS

| | |
|-----------------------------|---------|
| Contact Chambers in Use | 2.0 |
| Volume (Gallons) | 2340000 |
| Avg. Detention Time (Hours) | 1.28 |

Remarks: BY-PASS REPORTS (See Attached)

Report Selections: Period: 04/01/2016 00:00 thru 04/30/2016 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 |
|-------------------|-------------|------------------|--|------------------|--------------|
| SMH Sewer Manhole | 0057-W | 806 PINE WAY | | 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 | 2534582 | | 04/01/2016 | SINGLETON | OPS ASHIFT | DOCUMENTED | 03/09/2011 | LACK OF SYSTEM CAPACITY | UNAUTHORIZED DISCHAGE - WATERS | 04/01/16 07:16 AM | |

Discharge Reporting:

| | |
|----------------------|---|
| Discharge Amount: | 9,025 GAL |
| Cause: | LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT |
| Clean Up: | NO DEBRIS |
| Control Zone: | TEMPORARY SIGNS PLACED |
| Impact: | NO IMPACT OBSERVED |
| Repair: | A SOLUTION FOR THIS LOCATION CAN BE LOCATED IN THE IOAP |
| Public Notification: | TEMPORARY SIGNS PLACED AROUND THE AFFECTED AREA |

Notifications:

| | | |
|-----------------|--------|---|
| 3/30/16 1:00 pm | DISNOT | EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO 'DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV' |
| 3/30/16 1:00 pm | DISSNO | SUPPLEMENTAL EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE HAS BEEN SENT TO 'DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV' |

Report Selections: Period: 04/01/2016 00:00 thru 04/30/2016 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 | 27012-LH | 2408 GRAY FOX RD | | OHIO RIVER | STREAM |

| Activity Code / Description | WO # | Ref No | Initiated | Initiated By | Assigned To | Disch Status | Event Date | Problem | Result | Completed | Condition |
|--------------------------------|---------|--------|------------|--------------|-------------|---------------------------|------------|--------------------|---------------------------------|-------------------|-----------|
| : DISDW: DRY WEATHER DISCHARGE | 2542383 | | 04/09/2016 | PETERS | DODDS | REPAIRED - ISSUE RESOLVED | 04/09/2016 | STRUCTURAL FAILURE | UNAUTHORIZED DISCHARGE - WATERS | 04/09/16 12:15 PM | |

Discharge Reporting:

| | |
|----------------------|---|
| Discharge Amount: | 800 GAL |
| Cause: | CONTRACTOR CLEANING LINE TO REMOVE OBSTRUCTION, STOPPED CLEANING WHEN DISCHARGE STARTED. |
| Clean Up: | NO CLEAN UP |
| Control Zone: | SIGNS AND CAUTION TAPE PLACED AROUND THE IMPACTED AREA. |
| Impact: | STREAM DISCOLORATION |
| Repair: | CONTRACTOR STOPPED CLEANING WHEN DISCHARGING OCCURRED. CONTRACTOR REPAIRED PIPE ON 4/9/16 AT 4:00 PM. |
| Public Notification: | SIGNS AND CAUTION TAPE PLACED AROUND THE IMPACTED AREA. MSD STAFF COMMUNICATED WITH PUBLIC IN THE AREA. |

Notifications:

| | | |
|----------------|--------|---|
| 4/6/16 1:00 am | DISNOT | EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO 'DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV' |
|----------------|--------|---|

Report Selections: Period: 04/01/2016 00:00 thru 04/30/2016 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 | 84101-V | 4101 CAMP GROUND RD | | OHIO RIVER | STREAM |

| Activity Code / Description | WO # | Ref No | Initiated | Initiated By | Assigned To | Disch Status | Event Date | Problem | Result | Completed | Condition |
|--------------------------------|---------|--------|------------|--------------|-------------|---------------------------|------------|--------------------|---------------------------------|-------------------|-----------|
| : DISDW: DRY WEATHER DISCHARGE | 2540336 | | 04/05/2016 | BROWN | GROVES | REPAIRED - ISSUE RESOLVED | 04/05/2016 | MECHANICAL FAILURE | UNAUTHORIZED DISCHARGE - WATERS | 04/05/16 03:45 PM | |

Discharge Reporting:

| | |
|----------------------|---|
| Discharge Amount: | 14,700 GAL |
| Cause: | MECHANICAL FAILURE OF SEWER VALVE WHERE PRIVATE SEWER LINE CONNECTS TO MSD SEWER LINE |
| Clean Up: | NO CLEAN UP PERFORMED - DISCHARGING DIRECTLY INTO STREAM |
| Control Zone: | MSD NOTIFIED PRIVATE PROPERTY OWNERS - DISCHARGING DIRECTLY INTO STREAM |
| Impact: | DISCOLORATION OF DISCHARGE |
| Repair: | PRIVATE SEWER LINE OWNER HAS BEEN NOTIFIED. MSD CONTRACTOR COMPLETED THE REPAIR. |
| Public Notification: | MSD WEBSITE HAS BEEN UPDATED |

Notifications:

| | | |
|----------------|--------|---|
| 4/3/16 1:00 am | DISNOT | EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO 'DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV' |
|----------------|--------|---|

Total Facilities Printed: 3

Total Work Orders Printed: 3