

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
 DIVISION OF WATER POLLUTION CONTROL

PLANT Morristown Wastewater Treatment Plant

REPORT OF OPERATION OF WASTEWATER TREATMENT

OWNER Morristown Utilities Commission

MONTH OF May-24

| Date | Rainfall | Influent Daily Flow Million Gallons | Influent Maximum Flow Million Gallons | Influent Minimum Flow Million Gallons | Temp C Raw WstWtr | 5 Day BOD mg/L | | | SUSPENDED SOLIDS mg/L | | | SETTLABLE SOLIDS mg/L | | | DISSOLVED OXYGEN mg/L | | | pH | | | |
|-----------|----------|-------------------------------------|---------------------------------------|---------------------------------------|-------------------|----------------|----------------|----------------|-----------------------|----------------|----------------|-----------------------|----------------|----------------|-----------------------|----------------|----------------|------------|----------------|----------------|------------|
| | | | | | | Raw WstWtr | Inter Effluent | Final Effluent | Raw WstWtr | Inter Effluent | Final Effluent | Raw WstWtr | Inter Effluent | Final Effluent | Raw WstWtr | Inter Effluent | Final Effluent | Raw WstWtr | Inter Effluent | Final Effluent | Raw WstWtr |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 5/1/2024 | 0.01 | 4.336 | 8.00 | 2.00 | | 20 | 229 | 187 | 36 | 220 | 100 | 39 | 5.2 | <0.1 | <0.1 | 1.4 | 3.5 | 7.6 | 7.4 | 7.7 | 7.7 |
| 5/2/2024 | 0 | 4.300 | 9.00 | 0 | | 20 | 239 | 222 | 38 | 404 | 112 | 36 | 5.0 | <0.1 | <0.1 | 2.0 | 3.9 | 7.6 | 7.4 | 7.7 | 7.7 |
| 5/3/2024 | 0 | 4.088 | 8.50 | 2.00 | | 20 | | | | | | | 9.0 | <0.1 | <0.1 | 1.6 | 3.7 | 7.5 | 7.0 | 7.7 | 7.7 |
| 5/4/2024 | 0.33 | 3.603 | 8.50 | 2.00 | | 20 | | | | | | | | | | 1.8 | 3.9 | 7.6 | 7.1 | 7.8 | 7.8 |
| 5/5/2024 | 0.01 | 3.653 | 8.00 | 0 | | 20 | 263 | 240 | 14 | 328 | 124 | 9 | | | | 2.3 | 3.8 | 7.7 | 7.4 | 7.8 | 7.8 |
| 5/6/2024 | 0.48 | 4.870 | 8.00 | 3.00 | | 20 | 301 | 285 | 33 | 400 | 144 | 25 | 5.0 | 0.1 | <0.1 | 1.4 | 3.3 | 6.4 | 7.8 | 7.9 | 7.9 |
| 5/7/2024 | 0.06 | 5.264 | 8.00 | 4.00 | | 20 | 259 | 222 | 37 | 376 | 120 | 32 | 5.0 | <0.1 | <0.1 | 3.7 | 4.3 | 5.7 | 7.5 | 7.7 | 7.7 |
| 5/8/2024 | 0.88 | 5.674 | 10.00 | 3.00 | | 20 | 187 | 158 | 39 | 392 | 116 | 30 | 5.0 | 0.3 | <0.1 | 2.8 | 4.6 | 6.7 | 7.6 | 7.8 | 7.8 |
| 5/9/2024 | 0.60 | 9.034 | 14.00 | 5.00 | | 19 | 136 | 108 | 27 | 180 | 112 | 21 | 2.0 | 0.2 | <0.1 | 6.1 | 6.8 | 8.0 | 7.6 | 7.5 | 7.5 |
| 5/10/2024 | 0 | 6.942 | 10.00 | 2.00 | | 19 | | | | | | | 4.0 | <0.1 | <0.1 | 4.3 | 4.6 | 8.2 | 7.6 | 7.7 | 7.7 |
| 5/11/2024 | 0 | 5.189 | 8.00 | 2.50 | | 18 | | | | | | | | | | 4.7 | 3.8 | 7.8 | 7.5 | 7.7 | 7.7 |
| 5/12/2024 | 0 | 4.654 | 8.00 | 2.50 | | 18 | 114 | 77 | 16 | 216 | 84 | 15 | | | | 3.9 | 3.8 | 8.9 | 7.8 | 7.8 | 7.8 |
| 5/13/2024 | 0 | 6.316 | 10.00 | 2.50 | | 20 | 185 | 151 | 31 | 148 | 108 | 32 | 2.0 | <0.1 | <0.1 | 2.4 | 4.8 | 8.4 | 7.7 | 8.0 | 8.0 |
| 5/14/2024 | 0.04 | 5.988 | 12.00 | 3.50 | | 20 | 236 | 158 | 36 | 300 | 116 | 31 | 1.5 | <0.1 | <0.1 | 2.0 | 4.8 | 8.6 | 6.7 | 7.0 | 7.0 |
| 5/15/2024 | 0.59 | 5.777 | 7.00 | 2.50 | | 19 | 249 | 162 | 31 | 484 | 120 | 20 | 5.4 | 0.1 | <0.1 | 4.9 | 4.7 | 8.5 | 7.3 | 7.2 | 7.2 |
| 5/16/2024 | 0 | 5.046 | 8.00 | 3.00 | | 20 | 229 | 140 | 32 | 288 | 124 | 22 | 2.0 | 0.2 | <0.1 | 5.0 | 4.6 | 8.5 | 7.6 | 7.5 | 7.5 |
| 5/17/2024 | 0.02 | 5.041 | 8.00 | 2.00 | | 20 | | | | | | | 4.0 | 0.1 | <0.1 | 3.5 | 5.1 | 7.2 | 6.8 | 7.0 | 7.0 |
| 5/18/2024 | 0.38 | 4.188 | 8.00 | 2.50 | | 19 | | | | | | | | | | 3.6 | 3.7 | 7.1 | 6.9 | 7.5 | 7.5 |
| 5/19/2024 | 0.04 | 4.300 | 7.50 | 2.50 | | 19 | 171 | 144 | 15 | 252 | 104 | 11 | | | | 3.1 | 4.0 | 6.6 | 7.1 | 7.5 | 7.5 |
| 5/20/2024 | 0 | 4.784 | 7.50 | 3.00 | | 20 | 250 | 191 | 25 | 384 | 140 | 15 | 4.0 | <0.1 | <0.1 | 4.1 | 5.3 | 9.1 | 7.4 | 7.5 | 7.5 |
| 5/21/2024 | 0 | 4.844 | 8.00 | 3.00 | | 21 | 204 | 197 | 40 | 280 | 128 | 22 | 18.0 | 0.4 | <0.1 | 2.8 | 4.3 | 9.1 | 7.3 | 7.5 | 7.5 |
| 5/22/2024 | 0 | 4.790 | 8.00 | 2.50 | | 20 | 290 | 255 | 38 | 416 | 136 | 24 | 11.0 | <0.1 | <0.1 | 3.5 | 4.0 | 9.1 | 7.2 | 7.4 | 7.4 |
| 5/23/2024 | 45.00 | 4.873 | 7.50 | 2.50 | | 21 | 298 | 213 | 37 | 368 | 128 | 25 | 5.5 | <0.1 | <0.1 | 2.7 | 4.1 | 8.9 | 7.2 | 7.4 | 7.4 |
| 5/24/2024 | 0 | 4.649 | 7.50 | 3.00 | | 21 | | | | | | | 20.0 | <0.1 | <0.1 | 2.7 | 4.4 | 9.1 | 7.2 | 7.4 | 7.4 |
| 5/25/2024 | 0.36 | 3.755 | 7.50 | 2.00 | | 20 | | | | | | | | | | 4.5 | 5.1 | 9.4 | 7.4 | 7.4 | 7.4 |
| 5/26/2024 | 0.31 | 4.097 | 9.80 | 0.50 | | 20 | 239 | 177 | 36 | 124 | 76 | 21 | | | | 3.5 | 4.8 | 9.8 | 7.2 | 7.4 | 7.4 |
| 5/27/2024 | 0.14 | 6.598 | 11.50 | 0 | | 20 | 207 | 92 | 18 | 228 | 76 | 18 | 13.0 | <0.1 | <0.1 | 4.1 | 4.9 | 9.3 | 7.5 | 7.6 | 7.6 |
| 5/28/2024 | 0 | 5.221 | 8.50 | 1.50 | | 21 | 260 | 163 | 38 | 224 | 92 | 17 | 2.5 | <0.1 | <0.1 | 2.7 | 5.1 | 9.1 | 7.3 | 7.5 | 7.5 |
| 5/29/2024 | 0 | 5.522 | 9.00 | 3.00 | | 21 | 273 | 150 | 38 | 356 | 128 | 21 | 13.0 | 0.2 | <0.1 | 2.4 | 5.0 | 9.2 | 6.9 | 7.4 | 7.4 |
| 5/30/2024 | 0 | 4.897 | 7.50 | 2.50 | | 21 | 312 | 171 | 34 | 280 | 140 | 19 | 20.0 | 0.2 | <0.1 | 3.1 | 4.9 | 9.3 | 7.1 | 7.3 | 7.3 |
| 5/31/2024 | 0.00 | 4.283 | 7.50 | 2.50 | | 21 | | | | | | | 5.5 | <0.1 | <0.1 | 3.4 | 4.7 | 12.5 | 7.5 | 7.5 | 7.5 |
| TOTAL | 4.70 | 156.576 | | | | 0.00 | | | | | | | | | | | | | | | |
| AVERAGE | 0.15 | 5.051 | | | | #DIV/0! | 20 | 175 | 30 | 302 | 115 | 23 | 7.3 | 0.2 | <0.1 | 3.2 | 4.5 | 8.3 | 7.3 | 7.5 | 7.5 |
| MAXIMUM | 0.88 | 9.034 | 14.00 | | | 0.00 | 21 | 285 | 40 | 484 | 144 | 39 | 20.0 | 0.4 | <0.1 | 6.1 | 6.8 | 12.5 | 7.8 | 8.0 | 8.0 |
| MINIMUM | 0 | 3.603 | | 0.00 | | 0.00 | 18 | 77 | 14 | 124 | 76 | 9 | <0.1 | <0.1 | <0.1 | 1.4 | 3.3 | 5.7 | 6.7 | 7.0 | 7.0 |

Remarks _____

Signed Barry D. Calfee Certification Tennessee Operator #1726 RDA 1859

| Date | | | | | | | | | | | Raw Wastewater | | | | | Final Effluent | | | | | |
|-----------|----|----|----|----|----|----|----|----|----|----|----------------|------|-----|----|----|----------------|---------------------------------|----|---------------------------------|---------------------|------------------------|
| | | | | | | | | | | | | MLSS | SVI | | | | Nitrogen, Ammonia, total [as N] | | Nitrogen, Ammonia, total [as N] | Nitrogen, (T), mg/l | Phosphorous, (T), mg/l |
| 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 |
| 5/1/2024 | | | | | | | | | | | 1,890 | 379 | | | | | 93 | | 84 | | |
| 5/2/2024 | | | | | | | | | | | 1,940 | 335 | | | | | 54 | | 88 | | |
| 5/3/2024 | | | | | | | | | | | 2,050 | 385 | | | | | 63 | | 86 | | |
| 5/4/2024 | | | | | | | | | | | 2,370 | 338 | | | | | | | | | |
| 5/5/2024 | | | | | | | | | | | 2,120 | 396 | | | | | | | | | |
| 5/6/2024 | | | | | | | | | | | 2,190 | 406 | | | | | 106 | | 22 | | |
| 5/7/2024 | | | | | | | | | | | 2,280 | 404 | | | | | 24 | | 52 | 57 | 4.14 |
| 5/8/2024 | | | | | | | | | | | 2,430 | 377 | | | | | 31 | | 43 | | |
| 5/9/2024 | | | | | | | | | | | 1,250 | 196 | | | | | 5 | | 19 | | |
| 5/10/2024 | | | | | | | | | | | 2,670 | 322 | | | | | 12 | | 20 | | |
| 5/11/2024 | | | | | | | | | | | 2,770 | 298 | | | | | | | | | |
| 5/12/2024 | | | | | | | | | | | 2,420 | 279 | | | | | | | | | |
| 5/13/2024 | | | | | | | | | | | 2,010 | 413 | | | | | 17 | | 21 | | |
| 5/14/2024 | | | | | | | | | | | 2,020 | 369 | | | | | 31 | | 37 | | |
| 5/15/2024 | | | | | | | | | | | 2,180 | 406 | | | | | 18 | | 37 | | |
| 5/16/2024 | | | | | | | | | | | 2,120 | 429 | | | | | 119 | | 45 | | |
| 5/17/2024 | | | | | | | | | | | 1,710 | 526 | | | | | 133 | | 50 | | |
| 5/18/2024 | | | | | | | | | | | 1,872 | 519 | | | | | | | | | |
| 5/19/2024 | | | | | | | | | | | 1,940 | 474 | | | | | | | | | |
| 5/20/2024 | | | | | | | | | | | 1,820 | 527 | | | | | 29 | | 18 | | |
| 5/21/2024 | | | | | | | | | | | 2,160 | 440 | | | | | 69 | | 54 | | |
| 5/22/2024 | | | | | | | | | | | 2,070 | 432 | | | | | 45 | | 53 | | |
| 5/23/2024 | | | | | | | | | | | 2,130 | 437 | | | | | 22 | | 43 | | |
| 5/24/2024 | | | | | | | | | | | 1,780 | 525 | | | | | 29 | | 34 | | |
| 5/25/2024 | | | | | | | | | | | 1,800 | 514 | | | | | | | | | |
| 5/26/2024 | | | | | | | | | | | 1,650 | 538 | | | | | | | | | |
| 5/27/2024 | | | | | | | | | | | 1,900 | 497 | | | | | 31 | | 22 | | |
| 5/28/2024 | | | | | | | | | | | 2,120 | 448 | | | | | 19 | | 14 | | |
| 5/29/2024 | | | | | | | | | | | 2,150 | 449 | | | | | 22 | | 36 | | |
| 5/30/2024 | | | | | | | | | | | 2,030 | 468 | | | | | 25 | | 35 | | |
| | | | | | | | | | | | 2,090 | 455 | | | | | 66 | | 37 | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | | |
| AVERAGE | | | | | | | | | | | 2,062 | 419 | | | | | 46.22 | | 41.30 | 57.00 | 4.14 |
| MAXIMUM | | | | | | | | | | | 2,770 | 538 | | | | | 133.00 | | 88.00 | 57.00 | 4.14 |
| MINIMUM | | | | | | | | | | | 1,250 | 196 | | | | | 5.00 | | 14.00 | 57.00 | 4.14 |