# APPENDIX 1
## 2018 MOUNT PLEASANT PRETREATMENT

| (A) | (B) | C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) | (K) | (L) | (M) | (N) | (O) | (P) | (Q) | (R) | (S) | (T) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | INHIBIT | INHIBIT | | Lp | ALLOW. | | | | | ALLOCATED | LOCAL | | FINAL | |
| PARAMETER | PASS-THRU LIMIT MG/L | AVERAGE INFLUENT MG/L | AVERAGE EFFLUENT MG/L | REM. EFF. | AS-SUM | REVISED PASS-THRU CRITERIA MG/L | TO TRMT THRES MG/L | TO TRMT CRIT MG/L | SLUDGE DISPOSAL CRIT. MG/KG | ALLOW. INFLUENT LOADING LBS/DAY | INFLUENT LOADING (Q=0.35 MGD) MG/L | REVISED PROTECTION CRITERIA MG/L | PROTECTION CRITERIA (Q=0.35 MGD) LBS/DAY | B'GRND CONC. MG/L | BACKGROUND QUANTITIES (Q=0.35 MGD) LBS/DAY | AMOUNTS (Q=0.35 MGD) (50% ALLOC.) LBS/DAY | LIMITS (TOTAL IND. Q=0.071 MGD) MG/L | LABORATORY DETECTION LIMITS MG/L | LOCAL LIMITS (Q=0.071 MGD) MG/L | |
| COPPER | 0.0613 | 0.0274 | 0.0082 | 70.07% | | 0.2048 | 0.050 | 0.167 | 4300 | 25.75 | 8.8225 | 0.1671 | 0.488 | 0.021 | 0.061 | 0.213 | 0.3600 | 0.0010 | 0.36004 | |
| CHROMIUM | 0.0600 | BDL | BDL | 84.00% | * | 0.3750 | 0.250 | 1.563 | | | | 0.3750 | 1.095 | 0.001 | 0.003 | 0.546 | 0.9214 | 0.0010 | 0.92139 | |
| NICKEL | 0.1800 | 0.0026 | 0.0016 | 39.92% | | 0.2996 | 0.250 | 0.416 | 420 | 4.41 | 1.5125 | 0.2996 | 0.875 | 0.002 | 0.007 | 0.434 | 0.7324 | 0.0010 | 0.73235 | |
| CADMIUM | 0.0019 | BDL | BDL | 85.00% | * | 0.0125 | 1.000 | 6.667 | 85 | 0.42 | 0.1438 | 0.0125 | 0.037 | ND | 0.000 | 0.018 | 0.0309 | 0.0020 | 0.03089 | |
| LEAD | 0.0084 | 0.0016 | BDL | 82.00% | * | 0.0469 | 0.100 | 0.556 | 840 | 4.30 | 1.4728 | 0.0469 | 0.137 | 0.002 | 0.006 | 0.066 | 0.1106 | 0.0050 | 0.11062 | |
| MERCURY | 0.0001 | BDL | BDL | 76.00% | * | 0.0004 | 0.100 | 0.417 | 57 | 0.31 | 0.1078 | 0.0004 | 0.001 | 0.00000714 | 0.000 | 0.001 | 0.0009 | 0.0002 | 0.00091 | |
| SILVER | 0.0050 | BDL | BDL | 83.00% | * | 0.0294 | 0.250 | 1.471 | | | | 0.0294 | 0.086 | ND | 0.000 | 0.043 | 0.0725 | 0.0050 | 0.07249 | |
| ZINC | 0.2000 | 0.0331 | 0.0242 | 26.86% | | 0.2734 | 0.500 | 0.684 | 7500 | 117.18 | 40.1443 | 0.2734 | 0.798 | 0.098 | 0.360 | 0.219 | 0.3700 | 0.0500 | 0.37001 | |
| CYANIDE | 0.0055 | BDL | BDL | 62.00% | * | 0.0146 | 0.100 | 0.263 | | | | 0.0146 | 0.043 | 0.001 | 0.003 | 0.020 | 0.0335 | 0.0050 | 0.03347 | * |
| TOLUENE | 0.0150 | BDL | BDL | 96.00% | * | 0.3750 | 200 | 5,000 | | | | 0.3750 | 1.095 | ND | 0.000 | 0.547 | 0.9243 | 0.0010 | 0.92430 | * |
| BENZENE | 0.0030 | BDL | BDL | 84.00% | * | 0.0188 | 100 | 625 | | | | 0.0188 | 0.055 | ND | 0.000 | 0.027 | 0.0462 | 0.0010 | 0.04621 | |
| 1,1,1 TRICHLOROEHTHANE | 0.0300 | BDL | BDL | 88.00% | * | 0.2500 | | | | | | 0.2500 | 0.730 | ND | 0.000 | 0.365 | 0.6162 | 0.0010 | 0.61620 | * |
| ETHYLBENZENE | 0.0040 | BDL | BDL | 90.00% | * | 0.0400 | 200.000 | 2,000.000 | | | | 0.0400 | 0.117 | ND | 0.000 | 0.058 | 0.0986 | 0.0010 | 0.09859 | |
| CARBON TETRACHLORIDE | 0.0043 | BDL | BDL | 0.00% | * | 0.0043 | 2.900 | 2.900 | | | | 0.0043 | 0.013 | ND | 0.000 | 0.006 | 0.0107 | 0.0010 | 0.01070 | * |
| CHLOROFORM | 0.0850 | BDL | BDL | 62.00% | * | 0.2237 | 1.000 | 2.632 | | | | 0.2237 | 0.653 | ND | 0.000 | 0.326 | 0.5513 | 0.0050 | 0.55133 | * |
| TETRACHLOROETHYLENE | 0.0094 | BDL | BDL | 82.00% | * | 0.0524 | 20.000 | 111.111 | | | | 0.0524 | 0.153 | ND | 0.000 | 0.077 | 0.1293 | 0.0010 | 0.12926 | * |
| TRICHLOROETHYLENE | 0.0094 | BDL | BDL | 90.00% | * | 0.0944 | 1.000 | 10.000 | | | | 0.0944 | 0.276 | ND | 0.000 | 0.138 | 0.2327 | 0.0010 | 0.23268 | * |
| 1,2 TRANS DICHLORETHYLENE | 0.0015 | BDL | BDL | 80.00% | * | 0.0075 | | | | | | 0.0075 | 0.022 | ND | 0.000 | 0.011 | 0.0185 | 0.0010 | 0.01849 | * |
| METHYLENE CHLORIDE | 0.0500 | BDL | BDL | 48.00% | * | 0.0962 | 3.300 | | | | | 0.0962 | 0.281 | ND | 0.000 | 0.140 | 0.2370 | 0.0050 | 0.23700 | * |
| PHENOLS, TOTAL | 0.0500 | BDL | BDL | 89.00% | | 0.4545 | 4.000 | | | | | 0.4545 | 1.327 | ND | 0.000 | 0.663 | 1.1204 | 0.0400 | 1.12036 | * |
| NAPHTHALENE | 0.0010 | BDL | BDL | 92.00% | * | 0.0125 | 500.000 | | | | | 0.0125 | 0.036 | ND | 0.000 | 0.018 | 0.0308 | 0.0100 | 0.03081 | |
| PHTHALATES, TOTAL | 0.0645 | 0.0184 | BDL | 62.00% | * | 0.1697 | | | | | | 0.1697 | 0.495 | ND | 0.000 | 0.248 | 0.4184 | 0.0100 | 0.41837 | |
| DEHP | 0.0060 | 0.0184 | BDL | 62.00% | * | 0.0158 | | | | | | 0.0158 | 0.046 | ND | 0.000 | 0.023 | 0.0389 | 0.0030 | 0.03892 | |
| BOD | 8.0000 | 77.5800 | 3.2500 | 95.81% | ** | 190.9662 | | | | | | 190.9662 | 557.430 | | 0.000 | 278.715 | 470.6912 | | 471 | |
| SUSPENDED SOLIDS | 30.0000 | 80.0800 | 2.5800 | 96.78% | ** | 931.1628 | | | | | | 931.1628 | 2,718.064 | | 0.000 | 1,359.032 | 2,295.1196 | | 2.295 | |

* Removal Efficiency was determined from Tennessee Procedures Manual for Preparing a POTW Pretreatment Program Submission

** From 2016 MORS

| | | | | | |
|---|---|---|---|---|---|
| FLOW (PLANT AVG) | 0.350 | PERCENT ALLOCATION | 0.50 | | |
| | | INDUSTRIAL FLOW | 0.071 | | |

| | | |
|---|---|---|
| Average Total Solids | 20.0% | |
| 2016 Average Sludge Flow | 2,516 | gal/day |

| | |
|---|---|
| COLUMN B | PASS-THRU LIMITS WERE PROVIDED IN NPDES PERMIT |
| COLUMN C/D | DATA FROM 2016 MORs OR SEMI-ANNUAL TESTING REPORTS DEPENDING ON TESTING FREQUENCY OF CONSTIUENT |
| COLUMN F | SIGNIFIES ASSUMED PLANT REMOVAL WHEN NO DATA FROM THE PLANT IS AVAILABLE |
| COLUMN G | COLUMN B DIVIDED BY COLUMN E |
| COLUMN H | INHIBITION TO TREATMENT CRITERIA PROVIDED FROM TABLE 4.2 TENNESSEE PROCEDURES MANUAL FOR PREPARING PRETREATMENT PROGRAM SUBMISSION |
| COLUMN I | COLUMN H DIVIDED BY COLUMN E |
| COLUMN J | SLUDGE DISPOSAL CRITERIA PROVIDED FROM TABLE 1 OF PART 503 STANDARDS FOR THE USE OR DISPOSAL OF SEWAGE SLUDGE |
| COLUMN K/L | BIOSOLIDS CRITERIA |
| COLUMN M | REVISED PROJECTION CRITERIA IS LOWEST CONCENTRATION FROM PASS THRU, INHIBITION, AND SLUDGE DISPOSAL |
| COLUMN N | CONVERSION OF PROTECTION CRITERIA FROM MG/L TO LBS./DAY |
| COLUMN O | BACKGROUND CONCENTRATIONS FROM 2017 SEWER COLLECTION SYSTEM SAMPLING |
| COLUMN P | CONVERSION OF BACKGROUND QUANTITIES FROM MG/L TO LBS./DAY |
| COLUMN Q | ALLOCATED AMOUNTS ARE CALCULATED USING A PERCENTAGE WHICH IS HELD ASIDE FOR FUTURE EXPANSION AND GROWTH - 50% SET ASIDE FOR FUTURE GROWTH |
| COLUMN R | LOCAL LIMIT IS CALCULATED USING THE TOTAL INDUSTRIAL FLOW TO DETERMINE THE CONCENTRATION FOR THE INDUSTRIES |
| COLUMN S | MINIMUM DETECTION LIMITS OF LAB EQUIPMENT |
| COLUMN T | DAILY MAXIMUM (* DENOTES INSTANTANEOUS MAXIMUM); ENSURES THAT THE LOCAL LIMIT IS NOT BELOW THE LABORATORY DETECTION LIMIT |