March 25, 2022

**Utility Department Monthly Operating Report**

**Sewer Department**

January 2022 Effluent Monitoring Data

During the month there were no exceedances to report to EPA/DEP. See performance table below for further details of the regulatory monitoring data.

More noteworthy, the effluent BOD running out of the Train # 1 of settling tanks remained seasonally high through the last quarter of 2021 and now again into January. However, after reducing the chemical dosing of liquid chlorine and sulfite tablets in half and switching over to Train #2 on February 2 and then to Train # 3 on February 16, the BOD concentration average has dropped from 143 mg/l in January to 66 mg/l through February and into the first two weeks of March.

For the February 2022 operating period there were no exceedances to report.

**WWTP Monthly Performance Table**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters | **Jan** | Dec | Nov | YTD Lo | YTD Hi | **YTD Ave** | 2021Ave  | **DEP Limit** | **YTD Exceed-ances** |
| Flow GPD  | **11094** | 32470 | 27835 | 11094 | 11094 | **11094** | 20228 | **<63,000** | 0 |
| Precip inches | **5.73** | 4.05 | 6.20 | 5.73 | 5.73 | **5.73** | 4.42 | **n/a** | 0 |
| TSS lbs/day | **1.9** | 2.0 | 1.7 | 1.9 | 1.9 | **1.9** | 2.6 | **<76** | 0 |
| TSS lbs max | **3.2** | 4.3 | 3.8 | 3.2 | 3.2 | **3.2** | 5.1 | **report** | 0 |
| TSS mg/l ave | **17.0** | 11.2 | 8.0 | 17.0 | 17.0 | **17.0** | 26.1 | **<145** | 0 |
| TSS mg/l max | **19** | 16 | 11 | 19 | 19 | **19** | 37.5 | **report** | 0 |
| TSS % removal | **93.4** | 96.1 | 97.2 | 93.4 | 93.4 | **93.4** | 89.7 | **>50** | 0 |
| BOD lbs/day | **16.9** | 21.6 | 26.6 | 16.9 | 16.9 | **16.9** | 15.2 | **<107** | 0 |
| BOD lbs max | **33.7** | 37.9 | 44.8 | 33.7 | 33.7 | **33.7** | 26.9 | **report** | 0 |
| BOD mg/l ave | **142.5** | 130 | 128.4 | 142.5 | 142.5 | **142.5** | 140.1 | **<203** | 0 |
| BOD mg/l max | **170** | 170 | 160 | 170 | 170 | **170** | 161.6 | **report** | 0 |
| BOD % removal | **50.9** | 55.1 | 55.7 | 50.9 | 50.9 | **50.9** | 51.6 | **>30** | 0 |
| pH low | **6.5** | 6.5 | 6.5 | 6.5 | 6.5 | **6.5** | 6.5 | **>6.0** | 0 |
| pH high | **6.7** | 6.8 | 6.8 | 6.7 | 6.7 | **6.7** | 6.8 | **<9.0** | 0 |
| St solids ml/l | **0.1** | 0.1 | 0.1 | 0.1 | 0.1 | **0.1** | 0.15 | **report** | 0 |
| TRC mg/l max | **0.03** | 0.03 | 0.03 | 0.03 | 0.03 | **0.03** | .03 | **<0.3** | 0 |
| Fecal cfu ave | **<4** | <7.11 | <8 | <4 | <4 | **<4** | 9.58 | **<14** | 0 |
| Fecal cfu max | **<4** | <8 | <8 | <4 | <4 | **<4** | 19.37 | **<31** | 0 |
| Entero cfu ave | **na** | na | na | na | na | **na** | 10.8 | **<8** | 0 |
| Entero cfu max | **na**  | na  | na  | na  | na  | **na**  | 26.9 | **<54** | 0 |
| Hg ng/l ave | **na** | na | 18.28 | na | na | **na** | 18.28 | **33.4** | 0 |
| Hg ng/l max | **na** | na | 7.0 | na | na | **na** | 7.0 | **50.1** | 0 |
|  |  |  |  |  |  |  |  |  |  |

**Note**: *The last exceedance for flow was 188 months ago (2/2006). The last exceedance for BOD was 6 months ago (8/2021). The last exceedance for fecal coliform was 5 months ago (9/2021). The last exceedance for enterococci was 5 months ago (9/2021). The record annual average low for flow was 12,017 gpd in 2017.*

Drinking Water Department

January 2022 Production and Water Quality.

Purchased water for the month averaged 12,936 gpd compared to 15,602 gpd for the same month in 2021. The weekly free chlorine residual in the drinking water ranged from 0.29 - 0.9 ppm/Cl**2** compared to the recommended goal of >.20 to <1.0 ppm/Cl2. The EPA maximum concentration level (MCL) not to be exceeded for chlorine residual is 4.0 ppm. The monthly total coliform and e-coli water sample test results were both negative.