

Composite Effluent Quality Monitoring Results (1-year Operation of TSTP)

| Date | Monitoring Station | Replicate | Temperature* | pH | DO Saturation | DO | Salinity | Turbidity | Suspended Solids | Ammonia Nitrogen | Total Nitrogen | Total Inorganic Nitrogen | Total Phosphorus | E.Coli | Biochemical Oxygen Demand^ |
|------------|--------------------|-----------|--------------|-----|---------------|-------|----------|-----------|------------------|------------------|----------------|--------------------------|------------------|-----------|----------------------------|
| | | | °C | | % | mg/L | ppt | NTU | mg/L | mg/L | mg/L | mg/L | mg/L | cfu/100ml | mg/L |
| 11/1/2020 | Effluent | 1 | 5.4 | 7.4 | 92.3 | 11.59 | 0.56 | 1.7 | 2 | 1.66 | 13 | 11.7 | 2.07 | 69 | 2 |
| | | 2 | 5.4 | 7.4 | 90.6 | 11.32 | 0.56 | 1.6 | - | - | - | - | - | - | - |
| 11/2/2020 | Effluent | 1 | 6.4 | 7.9 | 80.6 | 9.86 | 0.22 | 2.6 | 2 | 2.6 | 12.8 | 11.2 | 2.08 | 83 | <2 |
| | | 2 | 6.4 | 7.9 | 80.1 | 9.80 | 0.22 | 2.5 | - | - | - | - | - | - | - |
| 11/3/2020 | Effluent | 1 | 6.5 | 7.9 | 82.6 | 9.91 | 0.22 | 2.4 | 2 | 2.76 | 13.2 | 11.2 | 2.06 | 96 | <2 |
| | | 2 | 6.5 | 7.9 | 82.0 | 9.84 | 0.22 | 2.5 | - | - | - | - | - | - | - |
| 11/4/2020 | Effluent | 1 | 7.0 | 8.1 | 74.4 | 9.33 | 0.21 | 2.7 | <2 | 3.48 | 11.4 | 9.95 | 1.87 | 150 | <2 |
| | | 2 | 6.8 | 8.1 | 75.3 | 9.39 | 0.22 | 2.6 | - | - | - | - | - | - | - |
| 11/5/2020 | Effluent | 1 | 6.3 | 8.0 | 81.5 | 9.82 | 0.19 | 2.6 | 2 | 1.37 | 10.1 | 8.44 | 1.51 | 46 | 2 |
| | | 2 | 6.3 | 8.0 | 79.3 | 9.71 | 0.2 | 2.7 | - | - | - | - | - | - | - |
| 11/6/2020 | Effluent | 1 | 6.6 | 8.0 | 74.0 | 9.61 | 0.24 | 2.8 | <2 | 1.67 | 10.3 | 9.99 | 1.99 | 10 | <2 |
| | | 2 | 6.7 | 8.0 | 72.1 | 9.59 | 0.24 | 2.9 | - | - | - | - | - | - | - |
| 11/7/2020 | Effluent | 1 | 6.3 | 8.0 | 71.4 | 9.55 | 0.22 | 2.5 | 4 | 4.52 | 10.2 | 9.43 | 1.79 | 10 | <2 |
| | | 2 | 6.3 | 8.0 | 72.6 | 9.61 | 0.22 | 2.4 | - | - | - | - | - | - | - |
| 11/8/2020 | Effluent | 1 | 6.5 | 8.0 | 79.6 | 8.90 | 0.22 | 2.3 | 2 | 1.49 | 12.3 | 11.5 | 2.1 | 13 | <2 |
| | | 2 | 6.5 | 8.0 | 79.0 | 8.83 | 0.22 | 2.4 | - | - | - | - | - | - | - |
| 11/9/2020 | Effluent | 1 | 6.6 | 7.8 | 76.6 | 8.96 | 0.22 | 2.5 | 2 | 0.8 | 16.1 | 13.8 | 2.45 | 15 | <2 |
| | | 2 | 6.6 | 7.8 | 75.7 | 8.88 | 0.22 | 2.6 | - | - | - | - | - | - | - |
| 11/10/2020 | Effluent | 1 | 6.6 | 7.9 | 78.6 | 8.80 | 0.22 | 2.7 | 8 | 2.78 | 12 | 10.7 | 2.2 | 93 | 3 |
| | | 2 | 6.6 | 7.9 | 78.0 | 8.72 | 0.22 | 2.8 | - | - | - | - | - | - | - |
| 11/11/2020 | Effluent | 1 | 6.5 | 8.0 | 80.6 | 9.66 | 0.22 | 2.4 | 3 | 8.18 | 15.6 | 14.9 | 1.99 | 470 | <2 |
| | | 2 | 6.5 | 8.0 | 80.1 | 9.60 | 0.22 | 2.5 | - | - | - | - | - | - | - |
| 11/12/2020 | Effluent | 1 | 6.6 | 7.9 | 78.9 | 8.96 | 0.22 | 2.2 | 3 | 9.1 | 17 | 14.4 | 1.74 | 23 | <2 |
| | | 2 | 6.6 | 7.9 | 78.2 | 8.90 | 0.22 | 2.3 | - | - | - | - | - | - | - |
| 11/13/2020 | Effluent | 1 | 6.6 | 8.0 | 81.7 | 8.98 | 0.22 | 2.4 | <2 | 4.12 | 12.3 | 9.26 | 1.57 | 6 | <2 |
| | | 2 | 6.6 | 8.0 | 81.0 | 8.90 | 0.22 | 2.5 | - | - | - | - | - | - | - |
| 11/14/2020 | Effluent | 1 | 6.6 | 7.9 | 84.9 | 9.50 | 0.22 | 2.3 | 3 | 5.48 | 11.1 | 10.4 | 1.59 | 180 | <2 |
| | | 2 | 6.6 | 7.9 | 84.0 | 9.40 | 0.22 | 2.3 | - | - | - | - | - | - | - |
| 11/15/2020 | Effluent | 1 | 6.5 | 7.8 | 85.4 | 9.32 | 0.22 | 2.2 | 2 | 7.8 | 14.7 | 14.2 | 1.71 | 330 | <2 |
| | | 2 | 6.5 | 7.8 | 84.8 | 9.25 | 0.22 | 2.2 | - | - | - | - | - | - | - |
| 11/16/2020 | Effluent | 1 | 6.8 | 7.9 | 77.5 | 9.87 | 0.26 | 2.7 | 3 | 11.4 | 16.7 | 16 | 1.86 | 130 | 3 |
| | | 2 | 6.7 | 7.9 | 79.2 | 9.96 | 0.25 | 2.6 | - | - | - | - | - | - | - |
| 11/17/2020 | Effluent | 1 | 5.9 | 8.0 | 69.8 | 7.90 | 1.9 | 1.6 | 3 | 13 | 17 | 16.9 | 1.75 | 340 | 3 |
| | | 2 | 6.0 | 8.0 | 66.2 | 7.62 | 1.9 | 1.6 | - | - | - | - | - | - | - |
| 11/18/2020 | Effluent | 1 | 6.7 | 8.1 | 73.7 | 9.18 | 0.23 | 2.8 | 2 | 9.51 | 13 | 12.6 | 1.66 | 64 | <2 |
| | | 2 | 6.7 | 8.1 | 74.5 | 9.21 | 0.23 | 2.9 | - | - | - | - | - | - | - |
| 11/19/2020 | Effluent | 1 | 6.3 | 8.1 | 76.4 | 8.96 | 0.22 | 2.4 | 2 | 12.5 | 15.3 | 15 | 1.89 | 37 | <2 |
| | | 2 | 6.2 | 8.1 | 76.8 | 8.94 | 0.2 | 2.4 | - | - | - | - | - | - | - |
| 11/20/2020 | Effluent | 1 | 6.7 | 8.0 | 76.5 | 8.85 | 0.2 | 2.2 | 3 | 6.83 | 12.9 | 11.1 | 1.67 | 30 | <2 |
| | | 2 | 6.6 | 8.0 | 77.3 | 8.88 | 0.2 | 2.3 | - | - | - | - | - | - | - |
| 11/21/2020 | Effluent | 1 | 6.3 | 8.0 | 72.6 | 8.13 | 0.2 | 2.4 | <2 | 1.89 | 16.3 | 14.4 | 1.44 | 240 | <2 |
| | | 2 | 6.5 | 8.0 | 71.8 | 8.07 | 0.2 | 2.6 | - | - | - | - | - | - | - |
| 11/22/2020 | Effluent | 1 | 6.6 | 7.8 | 77.4 | 8.54 | 0.2 | 2.1 | <2 | 3.56 | 17.4 | 16.8 | 1.4 | 66 | <2 |
| | | 2 | 6.6 | 7.8 | 76.9 | 8.48 | 0.2 | 2.1 | - | - | - | - | - | - | - |
| 11/23/2020 | Effluent | 1 | 6.7 | 7.7 | 78.6 | 8.40 | 0.2 | 2.4 | 3 | 0.8 | 16.1 | 15.5 | 1.32 | 38 | 5 |
| | | 2 | 6.7 | 7.7 | 78.0 | 8.33 | 0.2 | 2.5 | - | - | - | - | - | - | - |
| 11/24/2020 | Effluent | 1 | 6.5 | 7.9 | 59.7 | 6.92 | 0.3 | 2.3 | 4 | 0.63 | 15.7 | 14.2 | 1.42 | 120 | 2 |
| | | 2 | 6.5 | 7.9 | 60.8 | 7.01 | 0.3 | 2.1 | - | - | - | - | - | - | - |
| 11/25/2020 | Effluent | 1 | 6.2 | 8.1 | 78.2 | 8.79 | 0.21 | 2.2 | 6 | 1.08 | 16.8 | 15 | 1.86 | 420 | 3 |
| | | 2 | 6.2 | 8.0 | 78.4 | 8.82 | 0.21 | 2.2 | - | - | - | - | - | - | - |
| 11/26/2020 | Effluent | 1 | 6.8 | 7.8 | 73.2 | 8.62 | 0.2 | 2.2 | 8 | 0.18 | 16.8 | 14.9 | 2.06 | 380 | 3 |
| | | 2 | 6.8 | 7.8 | 72.8 | 8.55 | 0.2 | 2.2 | - | - | - | - | - | - | - |
| 11/27/2020 | Effluent | 1 | 6.7 | 7.8 | 68.6 | 7.44 | 0.3 | 2.2 | 3 | 1.46 | 16.5 | 15.4 | 1.68 | 6 | 2 |
| | | 2 | 6.7 | 7.8 | 68.0 | 7.38 | 0.3 | 2.2 | - | - | - | - | - | - | - |
| 11/28/2020 | Effluent | 1 | 6.6 | 7.7 | 66.7 | 7.22 | 0.3 | 2.1 | 2 | 5.98 | 12.2 | 12 | 1.69 | 36 | 2 |
| | | 2 | 6.6 | 7.7 | 66.1 | 7.15 | 0.3 | 2.1 | - | - | - | - | - | - | - |
| 11/29/2020 | Effluent | 1 | 6.6 | 7.6 | 74.8 | 7.96 | 0.3 | 2.0 | 2 | 5.89 | 14.6 | 14.4 | 1.73 | 22 | 2 |
| | | 2 | 6.6 | 7.6 | 74.2 | 7.90 | 0.3 | 2.1 | - | - | - | - | - | - | - |
| 11/30/2020 | Effluent | 1 | 6.6 | 7.8 | 72.4 | 7.66 | 0.3 | 2.2 | 2 | 5.13 | 13.8 | 13.7 | 1.57 | 49 | <2 |
| | | 2 | 6.6 | 7.8 | 71.7 | 7.60 | 0.3 | 2.3 | - | - | - | - | - | - | - |

| | | | | | | | |
|---------------------|----|---|------|---|-----|-----|------|
| Action Level | 20 | - | 28.6 | - | 3.3 | 664 | 13.3 |
| Limit Level | 40 | - | 57.1 | - | 6.6 | 996 | 26.6 |

A 24-hour flow-weighted composite effluent sample was collected and mixed.

* Effluent sample was collected by refrigerated autosampler. The collected samples were kept in low temperature during 24-hr sampling period.

^BOD5 tested with nitrification inhibitor