

REGIONAL MUNICIPALITY OF NIAGARA Public Works Department Water & Wastewater Services Division

GRIMSBY WATER TREATMENT PLANT

ANNUAL SUMMARY REPORT

(Prepared under Ontario Regulation 170/03)

January 1 to December 31, 2020

Ministry of the Environment, Conservation and Parks

Municipal Drinking Water License # 007-105 Drinking Water Works Permit # 007-205

1. Failure to meet with the requirements of the Act, the regulation, the system's approval:

The Grimsby Water Treatment Plant was operated in such a way that at no time did it fail to meet or exceed the requirements of the Safe Drinking Water Act, associated regulations, the system's approval or any order that may have been issued for this reporting period.

| 2020 | TOTAL FLOW | | AVERAGE DAY | | MAX. DAY | MIN. DAY | MAX. FLOW RATE | MIN. FLOW RATE | WASTE SLUDGE |
|-------|-------------|-----------------|-------------|-----------------|-----------------|-----------------|----------------------|----------------------|-----------------|
| Date | Raw (ML) | Treated (ML) | Raw (ML) | Treated (ML) | Treated (ML) | Treated (ML) | Treated (ML/D) | Treated (ML/D) | (ML) |
| Jan | 355.286 | 400.345 | 11.461 | 12.938 | 12.563 | 9.383 | 16.786 | 6.823 | 0.607 |
| Feb | 331.083 | 372.669 | 11.417 | 12.879 | 12.920 | 9.975 | 17.375 | 6.902 | 3.772 |
| Mar | 395.187 | 402.080 | 12.748 | 12.999 | 17.916 | 10.129 | 17.345 | 7.605 | 3.209 |
| Apr | 404.926 | 402.881 | 13.498 | 13.470 | 19.589 | 10.366 | 19.197 | 7.978 | 3.252 |
| Мау | 446.295 | 479.691 | 14.397 | 15.498 | 22.120 | 10.825 | 29.145 | 8.996 | 1.561 |
| Jun | 594.249 | 611.073 | 19.808 | 20.392 | 26.240 | 15.576 | 35.423 | 11.979 | 4.900 |
| Jul | 714.968 | 712.718 | 23.063 | 23.055 | 28.766 | 14.141 | 35.044 | 9.672 | 1.734 |
| Aug | 638.152 | 635.407 | 20.586 | 20.549 | 24.836 | 13.829 | 30.961 | 9.633 | 2.688 |
| Sep | 518.823 | 526.420 | 17.294 | 17.570 | 20.409 | 13.514 | 26.141 | 4.051 | 2.211 |
| Oct | 410.230 | 427.321 | 13.233 | 13.814 | 15.979 | 10.613 | 25.193 | 7.133 | 1.171 |
| Nov | 349.625 | 388.834 | 11.654 | 12.984 | 14.169 | 10.038 | 18.317 | 8.176 | 4.640 |
| Dec | 357.738 | 396.305 | 11.179 | 12.740 | 12.814 | 8.336 | 18.192 | 4.051 | 0.520 |
| TOTAL | 5516.562 | 5755.744 | | | | | | | 30.265 |
| MIN | | | | | | 8.336 | | 4.051 | 0.520 |
| MAX | | | | | 28.766 | | 35.423 | | 4.900 |
| AVG | | | 15.028 | 15.741 | | | | | 2.522 |

2. <u>A summary of flows for the reporting period January 1, 2020 – December 31, 2020:</u>

* The flow rates are moments in time, and can be affected by various circumstances, such as pump changes or valve position and therefore not unusual to have higher or lower than normal flows.

3. A comparison of actual flows to that of the flow rates set out in the system's approval:

Flow rates as set in:

- Municipal Drinking Water License # 007-105 Drinking Water Works Permit # 007-205 -

Maximum daily flow: 44.000 ML Maximum flow rate: 44.000 ML/day

| 2020 | AVERAGE DAY | % OF RATED | MAX. DAY | % OF RATED | MAX. FLOW RATE | % OF RATED CAPACITY | |
|------|-----------------|---------------|-----------------|---------------|----------------------|---------------------------|--|
| Date | Treated (ML) | CAPACITY | Treated (ML) | CAPACITY | Treated (ML/d) | | |
| Jan | 12.938 | 29.4% | 12.563 | 28.6% | 16.786 | 38.2% | |
| Feb | 12.879 | 29.3% | 12.920 | 29.4% | 17.375 | 39.5% | |
| Mar | 12.999 | 29.5% | 17.916 | 40.7% | 17.345 | 39.4% | |
| Apr | 13.470 | 30.6% | 19.589 | 44.5% | 19.197 | 43.6% | |
| Мау | 15.498 | 35.2% | 22.120 | 50.3% | 29.145 | 66.2% | |
| Jun | 20.392 | 46.3% | 26.240 | 59.6% | 35.423 | 80.5% | |
| Jul | 23.055 | 52.4% | 28.766 | 65.4% | 35.044 | 79.6% | |
| Aug | 20.549 | 46.7% | 24.836 | 56.4% | 30.961 | 70.4% | |
| Sep | 17.570 | 39.9% | 20.409 | 46.4% | 26.141 | 59.4% | |
| Oct | 13.814 | 31.4% | 15.979 | 36.3% | 25.193 | 57.3% | |
| Nov | 12.984 | 29.5% | 14.169 | 32.2% | 18.317 | 41.6% | |
| Dec | 12.740 | 29.0% | 12.814 | 29.1% | 18.192 | 41.3% | |