

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data**

December 2021

| Licence 2684 RRR | File # 1071.10 | Final Effluent 24 Hour Composite | | | | | | | Final Effluent Grab Sample | | | | | |
|---------------------|-------------------|-------------------------------------|--------------------------------|--------------|--------------|-------------|----------------|---------------------|-------------------------------|-------------------|-----------|------------|-------------------|--------|
| | | Date | Raw Sewage Daily Flow ML | TSS | BOD5 | cBOD5 | Ammonia | Ortho Phosphorus | Total Phosphorus | Total Nitrogen | Temp. | pH | Fecal Coliform | E.Coli |
| | | | | (mg/L) | (mg/L) | (mg/L) | (kg NH3-N/day) | (mg/L-P) | (mg/L-P)* | (mg/L-N)* | (°C) | (units) | MPN/100 mL | |
| 1-Dec-21 | 178.2 | 17 | 17 | 7 | 6,344 | 4.20 | 4.4 | 40.2 | 16.1 | 6.80 | 30 | 50 | | |
| 2-Dec-21 | 155.2 | 10 | 10 | 4 | 4,640 | 2.79 | 4.3 | 40.0 | 14.7 | 6.78 | 90 | 150 | | |
| 3-Dec-21 | 142.5 | 7 | 12 | 6 | 4,987 | 3.09 | 4.2 | 39.9 | 15.4 | 6.84 | 40 | 60 | | |
| 4-Dec-21 | 137.3 | 9 | nr | nr | 5,024 | 2.92 | 4.1 | 39.9 | 15.8 | 6.73 | 50 | 100 | | |
| 5-Dec-21 | 136.2 | 8 | 7 | 4 | 4,834 | 2.09 | 4.0 | 39.7 | 15.6 | 6.73 | 40 | 30 | | |
| 6-Dec-21 | 139.0 | 8 | 7 | 4 | 4,726 | 1.47 | 3.9 | 39.5 | 15.7 | 6.81 | 30 | 30 | | |
| 7-Dec-21 | 138.1 | 9 | 6 | <4 | 4,887 | 1.28 | 3.8 | 39.6 | 14.7 | 6.86 | 30 | 110 | | |
| 8-Dec-21 | 139.0 | 8 | 7 | 4 | 4,781 | 1.02 | 3.7 | 39.7 | 14.7 | 6.80 | 60 | 50 | | |
| 9-Dec-21 | 137.0 | 8 | 7 | <4 | 4,617 | 0.84 | 3.5 | 39.6 | nr | 6.76 | 30 | 120 | | |
| 10-Dec-21 | 140.0 | 7 | 9 | <4 | 4,913 | 0.79 | 3.4 | 39.7 | nr | 6.81 | 50 | 170 | | |
| 11-Dec-21 | 138.4 | 6 | 12 | 4 | 5,244 | 0.83 | 3.4 | 40.5 | 15.4 | 6.82 | 120 | 60 | | |
| 12-Dec-21 | 135.9 | 8 | 12 | <4 | 4,755 | 0.81 | 3.4 | 41.3 | 15.6 | 6.78 | 110 | 110 | | |
| 13-Dec-21 | 135.3 | 6 | 15 | 5 | 4,764 | 0.86 | 3.3 | 41.9 | 15.7 | 6.79 | 120 | 150 | | |
| 14-Dec-21 | 137.3 | 9 | 18 | 4 | 5,452 | 0.83 | 3.2 | 42.5 | 16.0 | 6.80 | 310 | 280 | | |
| 15-Dec-21 | 129.7 | 9 | 21 | 4 | 5,202 | 0.69 | 3.1 | 43.1 | 16.0 | 6.80 | 180 | 340 | | |
| 16-Dec-21 | 133.7 | 6 | 20 | 4 | 5,748 | 0.83 | 3.0 | 43.4 | 12.2 | 6.89 | 260 | 360 | | |
| 17-Dec-21 | 128.4 | 7 | 23 | 4 | 5,457 | 0.79 | 2.9 | 44.1 | 15.4 | 6.77 | 220 | 320 | | |
| 18-Dec-21 | 129.0 | 8 | 26 | <4 | 5,278 | 0.79 | 2.8 | 44.5 | 15.1 | 6.76 | 250 | 210 | | |
| 19-Dec-21 | 128.1 | 7 | 37 | 4 | 5,010 | 0.90 | 2.7 | 45.1 | 15.4 | 6.88 | 210 | 200 | | |
| 20-Dec-21 | 132.4 | 6 | 33 | 4 | 5,283 | 0.59 | 2.6 | 45.3 | 14.9 | 6.77 | 540 | 500 | | |
| 21-Dec-21 | 135.6 | 8 | 28 | 4 | 5,411 | 0.63 | 2.5 | 45.4 | 15.2 | 6.87 | 360 | 510 | | |
| 22-Dec-21 | 138.2 | 8 | 30 | 4 | 5,874 | 0.82 | 2.4 | 45.6 | 15.1 | 6.83 | 990 | 1,190 | | |
| 23-Dec-21 | 131.5 | 7 | 41 | 4 | 5,392 | 0.76 | 2.3 | 45.6 | 15.1 | 6.79 | 200 | 310 | | |
| 24-Dec-21 | 139.2 | 7 | 33 | <4 | 5,624 | 0.69 | 2.1 | 45.6 | 14.8 | 6.80 | 500 | 420 | | |
| 25-Dec-21 | 120.1 | 8 | 32 | <4 | 4,852 | 0.67 | 2.0 | 45.6 | 14.9 | 6.81 | 20 | 40 | | |
| 26-Dec-21 | 118.4 | 7 | 33 | 4 | 5,103 | 0.85 | 1.9 | 45.6 | 14.5 | 6.75 | 20 | 40 | | |
| 27-Dec-21 | 126.2 | 10 | 29 | 4 | 5,315 | 0.95 | 1.8 | 45.7 | 14.1 | 6.79 | 230 | 200 | | |
| 28-Dec-21 | 130.0 | 8 | 37 | 5 | 5,200 | 1.02 | 1.8 | 45.6 | 13.9 | 6.84 | 30 | 90 | | |
| 29-Dec-21 | 132.2 | 8 | 36 | 6 | 4,970 | 0.90 | 1.7 | 45.7 | 13.5 | 6.93 | <10 | 20 | | |
| 30-Dec-21 | 131.5 | 8 | 40 | 5 | 4,984 | 0.87 | 1.6 | 45.8 | 14.6 | 6.85 | 20 | 20 | | |
| 31-Dec-21 | 133.2 | 7 | 34 | 5 | 5,249 | 0.97 | 1.5 | 46.1 | 13.9 | 6.89 | 50 | 30 | | |
| Max: | 178.2 | | | | | | | | | | | | | |
| Min: | 118.4 | | | | | | | | | | | | | |
| Average: | 135.7 | 8 | 22 | <4 | 5,159 | 1.21 | | | 15.0 | 6.81 | | | | |
| Total Flow: | 4,206.8 | | | | | | | | | | 87 | 120 | | |
| Geo.Mean: | | | | | | | | | | | | | | |

Notes:

- (1) Effluent ammonia load based upon Raw Sewage flows and Final NH3-N concentrations
- (2) nr - not recorded or no result; na - not analyzed; ns - no sample
- (3) Where value is expressed as less than (<), the value is halved and used in the calculations
- (4) * = 30 day rolling average
- (5) Raw wastewater flows in excess of 400 ML/D will by-pass the secondary process and flows in excess of 675 ML/D will cause raw sewage to by-pass the plant