

City of Winnipeg
Water and Waste Department
West End Water Pollution Control Centre Monitoring Data
June, 2005

| Date | Raw Sewage | Final Effluent 24 Hour Composite | | | | | | | | | Final Effluent Grab Sample | | | |
|------------------|-------------|-------------------------------------|----------|----------|----------------|------------------|------------------|-----------|----------------|-----------|-------------------------------|-------------|----------------|-----------|
| | Daily Flow | TSS | cBOD5 | Ammonia | | Ortho Phosphorus | Total Phosphorus | | Total Nitrogen | | Temp | pH | Fecal Coliform | E.Coli |
| | ML | (mg/L) | (mg/L) | (mg/L-N) | (kg NH3-N/day) | (mg/L-P) | (mg/L-P) | (mg/L-P)* | (mg/L-N) | (mg/L-N)* | (°C) | (units) | MPN/100 mL | |
| 1-Jun-05 | 36.8 | 46 | 10 | 4.0 | 147 | 2.51 | 3.2 | 2.2 | 10 | 9 | 15.0 | 8.76 | <3 | <3 |
| 2-Jun-05 | 35.5 | 53 | 10 | 4.0 | 142 | 2.62 | 3.4 | 2.2 | 9 | 9 | 17.0 | 8.50 | 23 | 23 |
| 3-Jun-05 | 39.3 | 32 | 17 | 5.0 | 197 | 3.02 | 3.6 | 2.3 | 12 | 10 | nr | 8.56 | 4 | 4 |
| 4-Jun-05 | 36.5 | 28 | 13 | 5.0 | 183 | 3.10 | 3.1 | 2.3 | 10 | 9 | 19.0 | 8.12 | <3 | <3 |
| 5-Jun-05 | 38.4 | 21 | 8 | 6.0 | 230 | 3.26 | 3.5 | 2.4 | 12 | 10 | 18.0 | 7.97 | 9 | 9 |
| 6-Jun-05 | 36.0 | 26 | 5 | 6.0 | 216 | 3.29 | 3.7 | 2.4 | 10 | 10 | nr | 7.95 | 4 | 4 |
| 7-Jun-05 | 44.9 | 26 | 6 | 6.0 | 269 | 3.45 | 3.8 | 2.5 | 11 | 10 | 16.0 | 8.16 | 9 | 9 |
| 8-Jun-05 | 49.2 | 33 | 7 | 7.0 | 344 | 3.54 | 3.7 | 2.5 | 10 | 10 | 16.0 | 7.80 | <3 | <3 |
| 9-Jun-05 | 47.7 | ns | ns | ns | nr | ns | ns | ns | ns | ns | 16.0 | 7.84 | 23 | 23 |
| 10-Jun-05 | 42.6 | 33 | 10 | 8.0 | 341 | 3.61 | 3.8 | 2.6 | 12 | 9 | 14.0 | 7.92 | <3 | <3 |
| 11-Jun-05 | 40.8 | 43 | 10 | 8.0 | 326 | 3.51 | 3.9 | 2.7 | 15 | 10 | 15.0 | 7.95 | 7 | 7 |
| 12-Jun-05 | 58.0 | 65 | 10 | 9.0 | 522 | 3.57 | 4.0 | 2.7 | 14 | 10 | 16.0 | 7.93 | 15 | 15 |
| 13-Jun-05 | 61.8 | 42 | 5 | 10.0 | 618 | 3.77 | 3.5 | 2.8 | 12 | 10 | 17.0 | 7.93 | 23 | 23 |
| 14-Jun-05 | 65.2 | ns | ns | ns | nr | ns | ns | ns | ns | ns | 18.0 | 7.89 | <3 | <3 |
| 15-Jun-05 | 70.8 | ns | ns | ns | nr | ns | ns | ns | ns | ns | 18.0 | 7.80 | 4 | 4 |
| 16-Jun-05 | 65.5 | 20 | 6 | 11.0 | 721 | 3.54 | 3.7 | 2.8 | 16 | 10 | 18.0 | 7.87 | <3 | <3 |
| 17-Jun-05 | 57.1 | 25 | 8 | 12.0 | 685 | 3.66 | 3.5 | 2.9 | 16 | 10 | 18.0 | 7.56 | 4 | 4 |
| 18-Jun-05 | 50.9 | 68 | 7 | 12.0 | 611 | 3.39 | 3.6 | 3.0 | 16 | 11 | 20.0 | 7.98 | 75 | 15 |
| 19-Jun-05 | 46.5 | 16 | 6 | 12.0 | 558 | 3.47 | 3.5 | 3.0 | 17 | 11 | nr | 8.10 | 15 | 9 |
| 20-Jun-05 | 44.1 | 21 | 6 | 11.0 | 485 | 3.54 | 3.6 | 3.0 | 16 | 11 | 22.0 | 8.00 | 9 | 9 |
| 21-Jun-05 | 40.6 | 16 | 5 | 11.0 | 447 | 3.61 | 3.5 | 3.1 | 16 | 11 | 19.0 | 7.99 | 43 | 15 |
| 22-Jun-05 | 39.5 | 22 | 5 | 12.0 | 474 | 3.65 | 3.7 | 3.1 | 16 | 11 | 20.0 | 8.03 | 38 | 38 |
| 23-Jun-05 | 38.6 | 16 | 6 | 12.0 | 463 | 3.66 | 3.4 | 3.2 | 15 | 11 | nr | 8.07 | 23 | 23 |
| 24-Jun-05 | 36.7 | 15 | 6 | 12.0 | 440 | 3.65 | 3.5 | 3.2 | 16 | 12 | 21.0 | 8.16 | 9 | 9 |
| 25-Jun-05 | 35.5 | 11 | nr | 11.0 | 391 | 3.59 | nr | nr | 15 | 12 | 19.0 | 8.30 | 23 | 23 |
| 26-Jun-05 | 38.8 | 12 | 4 | 11.0 | 427 | 3.46 | 3.3 | 3.3 | 16 | 12 | 18.0 | 8.23 | 43 | 43 |
| 27-Jun-05 | 51.9 | 19 | 4 | 11.0 | 571 | 3.22 | 3.2 | 3.3 | 16 | 12 | 20.0 | 8.32 | 230 | 230 |
| 28-Jun-05 | 46.6 | 13 | 4 | 10.0 | 466 | 3.20 | nr | nr | nr | nr | 20.0 | 8.25 | 93 | 93 |
| 29-Jun-05 | 60.4 | 7 | 5 | 10.0 | 604 | 3.27 | nr | nr | nr | nr | 19.0 | 8.24 | 230 | 230 |
| 30-Jun-05 | 82.0 | 21 | 6 | 10.0 | 820 | 2.92 | 2.6 | 3.4 | 14 | 14 | 20.0 | 8.30 | 93 | 93 |
| Total: | 1438 | | | | | | | | | | | | | |
| Max: | 82.0 | | | | | | | | | | | | | |
| Min: | 35.5 | | | | | | | | | | | | | |
| Average: | 47.9 | 28 | 7 | 9 | 433 | 3.37 | 3.5 | | 14 | | 18.0 | 8.08 | | |
| Geo.Mean: | | | | | | | | | | | | | 13 | 12 |

Notes:

(1) * = 30 day rolling average

(2) effluent ammonia load based upon Raw Sewage flows and Final Cell NH3-N concentrations

(3) nr - not recorded; na - not analyzed; ns - no sample

(4) Final Effluent flow data unavailable