

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
July, 2007**

Date	Raw Sewage	Final Effluent 24 Hour Composite										Final Effluent Grab Sample			
	Daily Flow	TSS	BOD5	cBOD5	Ammonia		Ortho Phosphorus	Total Phosphorus		Total Nitrogen		Temp.	pH	Fecal Coliform	E.Coli
	ML**	(mg/L)	(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-Jul-07	280.6	12	37	7	9	2,525	2.05	2.5	2.7	20	23	17.0	6.86	79	49
2-Jul-07	270.4	6	45	3	5	1,352	1.60	2.1	2.7	16	22	17.6	6.90	49	22
3-Jul-07	281.3	8	41	4	7	1,969	1.92	2.2	2.6	18	22	17.0	6.79	33	5
4-Jul-07	234.1	8	55	4	9	2,107	2.38	3.0	2.6	24	22	19.5	6.79	130	49
5-Jul-07	216.7	8	57	4	12	2,600	2.70	3.1	2.6	27	22	18.9	6.70	540	130
6-Jul-07	211.4	6	54	4	12	2,537	2.82	3.3	2.7	27	22	20.3	6.72	350	79
7-Jul-07	190.1	7	52	3	12	2,281	2.90	3.6	2.7	27	22	18.5	6.92	170	130
8-Jul-07	180.1	6	48	4	12	2,161	2.76	2.5	2.6	27	22	18.2	6.74	16,000	3,500
9-Jul-07	193.8	16	60	10	11	2,132	2.59	3.3	2.6	26	22	20.0	6.57	350	31
10-Jul-07	410.1	7	37	4	6	2,461	1.46	2.1	2.7	54	23	17.5	6.70	(92,000)	(54,000)
11-Jul-07	248.2	26	73	8	12	2,978	2.46	3.2	2.7	28	23	19.1	6.75	130	33
12-Jul-07	201.8	16	21	4	11	2,220	2.84	3.1	2.8	26	23	18.8	6.84	110	46
13-Jul-07	278.8	16	21	8	11	3,067	2.51	2.7	2.8	23	23	19.0	6.81	(240,000)	(240,000)
14-Jul-07	262.2	15	24	8	9	2,360	2.19	2.4	2.8	21	23	19.7	6.72	8	2
15-Jul-07	200.3	4	7	2	7	1,402	2.11	2.0	2.7	20	23	19.8	6.72	49	49
16-Jul-07	184.1	8	<20	4	11	2,025	2.91	3.0	2.7	26	23	19.4	6.54	33	7
17-Jul-07	187.4	5	15	4	12	2,249	3.08	3.3	2.7	35	23	19.2	6.54	33	13
18-Jul-07	186.9	8	15	5	13	2,430	3.32	3.6	2.7	34	24	19.5	6.53	23	13
19-Jul-07	180.2	9	18	4	15	2,703	3.45	4.0	2.7	31	25	19.6	6.43	540	17
20-Jul-07	177.9	9	19	5	15	2,669	3.47	3.6	2.6	30	24	19.6	6.54	240	79
21-Jul-07	166.2	7	23	4	14	2,327	3.43	4.2	2.7	28	25	19.0	6.70	46	4
22-Jul-07	165.3	5	71	3	14	2,314	3.23	3.2	2.7	30	25	20.0	6.50	na	na
23-Jul-07	182.3	10	21	5	13	2,370	3.04	2.9	2.8	28	25	19.8	6.54	130	79
24-Jul-07	184.3	8	20	5	12	2,212	3.18	3.1	2.8	27	26	20.3	6.65	350	240
25-Jul-07	257.1	32	58	25	13	3,342	2.31	2.7	2.8	22	26	21.6	6.45	920	110
26-Jul-07	304.7	6	12	3	7	2,133	1.44	1.8	2.9	18	26	21.8	6.58	3,500	1,600
27-Jul-07	194.6	7	12	4	14	2,724	2.47	2.4	2.9	27	27	20.8	6.86	280	140
28-Jul-07	168.9	8	14	5	14	2,365	2.58	2.6	2.9	27	27	20.5	6.97	540	170
29-Jul-07	165.8	5	14	4	12	1,990	2.82	2.9	2.9	30	27	20.7	6.84	1,600	540
30-Jul-07	182.4	12	21	6	12	2,189	2.46	3.2	2.9	24	27	20.5	6.71	2,400	920
31-Jul-07	187.0	7	18	6	18	3,366	2.90	3.3	2.9	29	28	21.1	6.53	1,600	170
Max:	410														
Min:	165														
Average:	217.3	10	32	5	11	2,373	2.63	2.9		27		19.5	6.69		
Geo.Mean:														219	63

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)** Flow, highlighted in bold, in excess of 380 ML/D per clause 26 of Licence 2684RR.
- (6) Bracketed Coliform results not used in the Geometric Mean calculation.
- (7) 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.
- (8) July 1-10, secondary effluent composite sample analyzed in lieu of the off-line final effluent sampler.