

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
September, 2006**

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)*	(oC)	(units)	MPN/100 mL	
1-Sep-06	159.1	9	29	5	27	4,296	4.04	4.2	3.8	34	33	21.0	6.77	230	93
2-Sep-06	147.7	17	23	4	24	3,545	3.99	4.5	3.7	36	33	20.0	6.74	93	93
3-Sep-06	138.6	8	29	4	24	3,326	3.97	nr	3.7	nr	33	21.0	6.88	4300	1500
4-Sep-06	151.6	8	nr	nr	22	3,335	3.99	4.5	3.8	32	33	20.5	6.79	230	43
5-Sep-06	170.1	6	36	6	23	3,912	4.01	4.4	3.9	33	33	20.0	6.71	230	230
6-Sep-06	164.8	9	36	6	12	1,978	4.33	5.1	4.0	38	34	20.5	6.68	4300	2300
7-Sep-06	163.1	7	37	7	27	4,404	4.65	5.4	4.0	42	35	21.0	6.60	380	380
8-Sep-06	160.2	7	35	6	27	4,325	4.51	4.7	4.1	38	35	19.0	6.67	1200	750
9-Sep-06	154.7	10	38	6	27	4,177	4.46	4.8	4.1	38	35	19.0	6.77	120	120
10-Sep-06	159.3	12	22	5	24	3,823	4.27	4.3	4.1	34	35	19.5	6.87	150	150
11-Sep-06	159.4	17	41	8	23	3,666	4.12	4.7	4.2	36	35	19.0	6.93	150	93
12-Sep-06	174.1	11	31	6	24	4,178	3.43	2.8	4.2	28	36	19.0	6.67	930	210
13-Sep-06	157.4	ns	ns	ns	ns	ns	ns	ns	4.2	ns	36	ns	ns	ns	ns
14-Sep-06	158.5	15	52	8	25	3,963	4.29	4.8	4.2	38	36	20.0	6.60	930	930
15-Sep-06	174.5	12	36	7	25	4,363	4.18	4.8	4.3	38	36	20.0	6.62	930	930
16-Sep-06	248.6	29	53	15	18	4,475	3.11	3.5	4.2	30	36	21.0	6.68	2,300	2,300
17-Sep-06	391.5	30	36	9	7	2,741	0.98	1.7	4.1	17	35	17.5	6.67	(230,000)	(230,000)
18-Sep-06	371.0	24	30	9	10	3,710	1.44	2.1	4.0	21	35	17.0	7.40	930	430
19-Sep-06	238.6	9	24	4	12	2,863	1.75	2.1	4.0	20	33	19.9	6.78	750	210
20-Sep-06	187.0	5	26	5	24	4,488	3.49	3.9	4.0	34	33	19.0	6.87	930	430
21-Sep-06	183.6	11	34	7	24	4,406	4.45	4.9	4.0	37	33	18.0	6.64	430	430
22-Sep-06	176.3	10	27	6	24	4,231	4.41	4.9	4.0	37	33	19.5	6.67	430	150
23-Sep-06	168.0	10	35	7	25	4,200	4.57	4.6	4.0	34	33	20.0	6.88	150	75
24-Sep-06	177.5	9	35	7	24	4,260	4.43	4.1	4.0	32	33	19.0	6.88	230,000	93,000
25-Sep-06	192.1	10	35	6	20	3,842	3.44	3.8	4.0	29	33	18.5	7.02	93,000	43,000
26-Sep-06	189.7	14	41	8	22	4,173	4.01	4.2	4.0	32	33	18.0	6.78	430	75
27-Sep-06	165.9	12	35	7	28	4,645	4.28	4.8	4.1	39	33	20.0	6.79	3,800	3,800
28-Sep-06	170.8	11	45	7	27	4,612	4.39	4.9	4.1	39	33	17.5	6.83	230	230
29-Sep-06	204.7	9	38	6	18	3,685	3.21	2.8	4.2	22	33	18.5	6.74	1,500	750
30-Sep-06	163.9	8	44	4	18	2,950	3.31	4.3	4.1	30	33	19.0	7.03	230	43
Max:	392														
Min:	139														
Average:	187.4	12	35	7	22	3,882	3.78	4.1		33		19.5	6.79		
Geo.Mean:														806	438

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 2684R.
- (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.