

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
November, 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-Nov-06	158.0	10	39	8	30	4,740	3.98	4.7	4.6	37	39	15.5	6.63	93	43
2-Nov-06	158.0	9	46	10	30	4,740	4.28	5.0	4.6	39	39	18.8	6.66	750	230
3-Nov-06	154.7	9	43	8	29	4,486	4.09	5.6	4.7	44	39	15.2	6.73	930	230
4-Nov-06	157.7	15	54	12	30	4,731	4.33	4.4	4.7	41	40	18.4	6.84	1,500	1,500
5-Nov-06	179.0	17	56	9	26	4,654	3.78	4.5	4.7	33	40	16.7	6.87	430	230
6-Nov-06	182.1	16	53	9	20	3,642	2.89	2.7	4.7	30	40	15.4	6.59	430	150
7-Nov-06	196.9	15	53	8	24	4,726	3.21	3.9	4.6	30	40	16.2	6.69	230	43
8-Nov-06	223.4	19	56	8	22	4,915	2.60	3.4	4.6	29	40	16.7	6.72	15,000	7,500
9-Nov-06	161.7	8	38	5	27	4,366	3.34	4.2	4.5	35	40	14.4	6.62	430	93
10-Nov-06	154.9	12	38	7	32	4,957	4.11	4.7	4.5	40	40	15.4	6.74	150	93
11-Nov-06	151.4	9	42	7	28	4,239	3.59	4.4	4.5	38	40	16.5	6.80	1,500	750
12-Nov-06	148.3	11	42	7	30	4,449	4.15	4.9	4.5	37	39	16.0	6.85	150	150
13-Nov-06	151.9	12	40	8	24	3,646	4.02	5.1	4.5	37	39	16.0	6.78	930	150
14-Nov-06	159.0	11	35	7	26	4,134	3.73	4.8	4.5	37	39	16.6	6.75	930	93
15-Nov-06	162.8	20	53	10	27	4,396	3.85	5.1	4.5	39	39	15.4	6.68	2,300	2,300
16-Nov-06	160.9	10	38	6	32	5,149	4.01	4.7	4.6	42	39	16.6	6.75	9,300	9,300
17-Nov-06	161.2	12	35	6	33	5,320	4.06	4.9	4.6	45	39	15.6	6.84	4,300	4,300
18-Nov-06	159.5	10	40	6	31	4,945	4.09	4.9	4.5	41	39	15.5	6.84	2,300	2,300
19-Nov-06	159.8	13	39	6	31	4,954	4.24	4.9	4.5	41	39	15.5	6.92	43,000	43,000
20-Nov-06	157.9	13	64	8	30	4,737	3.88	5.1	4.5	41	39	16.0	6.73	9,300	9,300
21-Nov-06	164.4	14	50	8	29	4,768	3.80	4.9	4.5	41	39	15.5	6.68	15,000	15,000
22-Nov-06	165.7	15	52	8	31	5,137	4.01	5.0	4.5	41	38	16.7	6.61	2,300	2,300
23-Nov-06	165.2	17	69	11	31	5,121	4.02	5.4	4.5	44	39	15.3	6.66	230	230
24-Nov-06	158.7	12	59	8	30	4,761	3.99	5.6	4.6	44	39	16.7	6.73	430	230
25-Nov-06	157.5	11	34	6	30	4,725	4.01	5.3	4.6	41	39	14.7	6.71	210	93
26-Nov-06	151.4	12	76	8	31	4,693	4.34	5.6	4.6	43	39	17.0	6.79	64	64
27-Nov-06	157.9	12	74	8	29	4,579	4.13	5.6	4.7	41	39	16.4	6.81	150	93
28-Nov-06	160.3	15	59	8	30	4,809	4.04	4.9	4.7	39	39	14.2	6.73	4,300	1,500
29-Nov-06	158.8	11	74	7	30	4,764	4.00	4.6	4.8	40	39	14.7	6.73	230	230
30-Nov-06	154.9	10	68	7	30	4,647	4.39	5.4	4.8	44	39	16.3	6.74	430	75
Max:	223.4														
Min:	148.3														
Average:	163.1	13	51	8	29	4,664	3.90	4.8		39		16.0	6.74		
Geo.Mean:														947	503

- 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.