

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
January 2009

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-Jan-09	140.3	11	36	7	28	3,941	4.10	4.8	4.3	36	35	14	6.97	7,900	7,900
2-Jan-09	148.7	14	37	8	28	4,147	4.18	5.2	4.4	35	35	15	6.83	490	84
3-Jan-09	142.7	14	41	6	28	3,939	4.26	5.1	4.4	35	35	13	7.11	230	230
4-Jan-09	150.8	ns	ns	ns	ns	ns	ns	ns	4.4	ns	35	13	7.12	7,900	4,900
5-Jan-09	155.9	ns	ns	ns	ns	ns	ns	ns	4.5	ns	35	14	6.74	700	490
6-Jan-09	158.1	39	47	12	25	3,890	4.90	6.2	4.5	37	35	14	6.63	490	330
7-Jan-09	165.6	12	22	6	27	4,537	4.50	5.4	4.6	36	36	14	6.68	790	330
8-Jan-09	157.6	14	22	8	28	4,350	4.28	5.0	4.6	35	36	13	7.01	6,300	6,300
9-Jan-09	158.5	16	31	7	27	4,279	4.03	5.0	4.6	34	36	13	7.03	28,000	14,000
10-Jan-09	154.0	12	20	8	27	4,082	3.95	4.9	4.6	34	36	13	7.00	7,900	7,900
11-Jan-09	153.3	19	22	8	25	3,893	3.92	5.1	4.7	33	35	13	6.94	4,900	4,900
12-Jan-09	159.8	16	23	8	24	3,836	3.72	4.7	4.7	33	35	13	6.87	13,000	7,900
13-Jan-09	157.0	18	20	7	25	3,847	3.89	5.0	4.7	33	35	13	6.54	790	490
14-Jan-09	157.4	20	23	8	24	3,826	3.93	5.2	4.7	34	35	13	6.61	490	490
15-Jan-09	158.7	24	25	9	26	4,094	4.29	5.6	4.8	34	35	13	6.69	1,300	490
16-Jan-09	164.4	18	29	10	26	4,290	4.11	5.2	4.8	37	35	12	6.75	7,900	2,800
17-Jan-09	161.0	15	28	8	25	3,945	3.69	4.9	4.8	36	35	12	6.93	790	790
18-Jan-09	161.4	21	26	8	23	3,713	3.51	4.7	4.8	36	35	13	6.85	790	790
19-Jan-09	168.8	18	26	9	24	4,018	3.54	4.6	4.8	33	35	14	6.65	790	490
20-Jan-09	170.6	17	25	8	25	4,316	3.87	5.1	4.8	32	35	14	6.72	230	230
21-Jan-09	165.8	17	16	6	25	4,178	4.18	5.2	4.9	32	35	14	6.97	1,700	1,100
22-Jan-09	164.2	20	29	10	25	4,055	4.24	5.3	4.9	32	35	14	6.60	1,300	1,300
23-Jan-09	161.5	25	24	9	25	4,006	4.12	5.2	5.0	32	34	12	6.77	790	490
24-Jan-09	156.3	15	23	9	24	3,768	4.06	5.3	5.0	31	34	12	6.91	490	490
25-Jan-09	153.7	23	28	9	24	3,643	3.94	5.1	5.0	29	34	13	6.84	220	26
26-Jan-09	157.1	18	28	8	22	3,441	4.10	5.2	5.0	25	34	12	6.78	540	220
27-Jan-09	158.8	15	30	8	23	3,574	4.27	5.6	5.1	27	33	13	6.84	49	49
28-Jan-09	158.6	20	36	8	24	3,854	4.35	5.6	5.1	29	33	12	6.77	490	330
29-Jan-09	153.8	17	30	8	25	3,875	4.58	5.5	5.1	30	33	13	6.80	1,100	350
30-Jan-09	149.0	18	29	11	25	3,649	4.36	5.2	5.2	28	33	13	6.82	220	110
31-Jan-09	147.3	19	31	10	24	3,476	4.08	5.4	5.2	29	32	13	6.85	280	140
Max:	171														
Min:	140														
Average:	157	18	28	8	25	3,947	4.10	5.2		33		13	6.83		
Geo.Mean:														1,085	671

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.