

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
February 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-Feb-09	144.4	18	29	9	25	3,596	3.84	4.9	5.2	30	32	13	6.98	3,100	1,300
2-Feb-09	147.5	16	35	9	23	3,363	3.68	5.1	5.2	28	32	13	6.77	490	130
3-Feb-09	149.4	17	35	8	23	3,421	3.99	5.0	5.2	26	32	13	6.72	230	130
4-Feb-09	149.8	15	29	8	23	3,371	3.95	5.1	5.2	31	32	13	6.99	170	170
5-Feb-09	154.1	17	33	9	24	3,714	4.28	5.3	5.1	33	32	12	6.84	1,700	1,100
6-Feb-09	155.3	20	35	11	24	3,758	4.25	5.1	5.1	33	32	13	6.82	790	790
7-Feb-09	151.1	23	31	12	26	3,853	3.72	4.8	5.1	33	32	12	6.98	490	330
8-Feb-09	147.9	22	40	10	24	3,490	3.50	4.5	5.1	33	32	13	6.95	4,600	790
9-Feb-09	239.8	36	44	20	21	5,084	3.03	4.4	5.1	33	31	13	6.79	(790)	(170)
10-Feb-09	394.3	31	31	15	13	5,205	1.75	3.0	5.0	24	31	10	6.83	(35,000)	(17,000)
11-Feb-09	250.5	16	23	8	16	3,958	2.21	3.0	5.0	24	31	9	6.91	13,000	2,200
12-Feb-09	167.8	ns	ns	ns	ns	ns	ns	ns	5.0	ns	31	11	7.10	230	130
13-Feb-09	156.7	ns	ns	ns	ns	ns	ns	ns	5.0	ns	31	12	6.96	330	170
14-Feb-09	150.0	ns	ns	ns	ns	ns	ns	ns	4.9	ns	31	12	7.00	170	40
15-Feb-09	144.0	18	22	10	25	3,571	4.17	5.1	4.9	34	30	12	7.08	1,100	490
16-Feb-09	140.3	9	30	12	25	3,437	4.02	5.2	4.9	32	30	13	7.30	230	130
17-Feb-09	152.1	18	22	10	24	3,696	4.17	4.9	5.0	31	30	12	6.90	170	17
18-Feb-09	160.1	21	24	9	24	3,826	3.79	5.0	5.0	32	30	13	6.99	790	330
19-Feb-09	152.6	25	26	11	23	3,571	3.98	5.3	5.0	32	30	12	6.79	490	490
20-Feb-09	152.9	45	26	12	26	4,037	4.16	5.2	5.0	31	30	13	6.77	13,000	1,700
21-Feb-09	147.1	21	26	10	25	3,633	3.91	4.9	5.0	31	30	12	6.98	220	220
22-Feb-09	143.0	21	27	12	25	3,532	3.44	4.9	4.9	33	30	12	6.93	130	33
23-Feb-09	148.5	22	32	11	25	3,713	3.48	4.7	4.9	33	30	13	6.86	490	79
24-Feb-09	149.6	9	31	11	24	3,560	3.52	4.7	4.9	31	30	14	6.85	4,900	2,200
25-Feb-09	150.5	16	24	11	23	3,522	3.72	4.9	4.9	32	31	13	6.81	70	49
26-Feb-09	149.1	23	44	14	22	3,206	4.00	5.2	4.9	31	31	12	6.89	700	460
27-Feb-09	150.0	15	26	12	25	3,735	4.13	5.1	4.9	32	31	12	6.88	130	17
28-Feb-09	140.3	11	nr	nr	25	3,508	4.10	5.1	4.9	33	31	12	6.93	330	130
Max:	394														
Min:	140														
Average:	166	20	30	11	23	3,734	3.71	4.8		31		12.2	6.91	586	232
Geo.Mean:															

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.