

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
January 2010

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-10	131.8	14	14	5	26	3,480	4.18	4.6	5.0	30	33	16	6.81	478	170
2-Jan-10	136.2	11	19	6	30	4,086	4.65	5.2	5.0	31	33	15	6.91	1,300	1,300
3-Jan-10	141.9	8	19	5	35	4,896	4.98	5.3	5.0	37	33	16	6.92	540	350
4-Jan-10	149.1	10	21	6	30	4,458	4.57	5.3	5.1	36	33	16	6.83	220	140
5-Jan-10	151.4	10	22	5	33	4,921	5.05	5.5	5.1	33	33	16	6.79	49	22
6-Jan-10	150.4	8	15	6	29	4,422	4.45	5.2	5.1	36	33	nr	6.88	200	200
7-Jan-10	150.3	8	22	5	29	4,329	4.46	5.0	5.1	32	33	14	6.67	170	110
8-Jan-10	149.6	7	21	6	30	4,518	4.84	5.2	5.1	33	33	14	6.80	79	33
9-Jan-10	144.1	15	18	5	29	4,121	4.51	5.3	5.1	34	33	13	6.90	330	330
10-Jan-10	142.9	15	22	7	29	4,130	4.44	5.2	5.1	34	33	13	6.84	460	460
11-Jan-10	148.3	12	26	7	29	4,256	5.41	5.4	5.1	35	33	14	6.78	350	280
12-Jan-10	148.0	11	25	6	27	4,055	4.23	5.1	5.1	33	33	14	6.84	140	140
13-Jan-10	150.0	14	26	5	28	4,200	4.53	5.4	5.1	35	33	14	6.82	240	<2
14-Jan-10	150.1	22	26	8	27	4,083	4.61	5.6	5.2	34	33	15	6.80	350	350
15-Jan-10	147.8	12	28	8	29	4,212	4.62	5.3	5.2	35	33	14	6.78	13	13
16-Jan-10	144.0	16	29	9	27	3,946	4.29	5.1	5.1	33	33	14	6.89	330	230
17-Jan-10	143.5	18	30	7	28	3,975	4.22	5.0	5.1	33	33	15	6.91	230	130
18-Jan-10	147.2	23	48	9	27	4,019	4.42	5.2	5.2	33	33	14	6.70	4,900	2,300
19-Jan-10	149.5	20	28	7	29	4,336	4.84	5.8	5.2	32	33	14	6.74	79	33
20-Jan-10	148.9	16	28	9	28	4,199	4.73	5.5	5.2	33	33	14	6.58	350	170
21-Jan-10	145.9	21	27	9	27	3,998	4.04	5.0	5.2	32	33	14	6.75	940	460
22-Jan-10	147.4	4	24	8	29	4,201	4.18	5.0	5.2	33	33	14	6.77	170	170
23-Jan-10	161.4	15	26	8	29	4,600	3.82	4.7	5.2	34	33	14	6.88	1,400	1,400
24-Jan-10	176.4	25	23	9	24	4,145	3.16	4.2	5.2	35	33	14	6.74	49	23
25-Jan-10	151.7	15	28	6	26	3,929	3.92	4.5	5.2	31	33	14	6.82	130	79
26-Jan-10	145.4	21	33	8	26	3,737	4.06	4.8	5.2	28	33	14	6.79	140	46
27-Jan-10	145.9	23	25	9	26	3,735	3.71	4.4	5.1	33	33	14	6.78	790	170
28-Jan-10	144.7	18	23	7	28	4,023	2.53	3.1	5.0	31	33	nr	6.84	920	47
29-Jan-10	145.9	15	24	8	29	4,158	1.88	2.3	4.9	32	33	14	6.77	170	49
30-Jan-10	142.5	14	22	9	27	3,876	1.94	2.6	4.9	29	33	ns	ns	ns	ns
31-Jan-10	140.6	18	25	8	26	3,684	1.72	2.4	4.8	28	33	14	6.88	1,700	1,100
Max:	176														
Min:	132														
Average:	148	15	25	7	28	4,152	4.10	4.8		33		14	6.81		
Geo.Mean:														283	134

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 2684RRR.
- (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) Total Nitrogen results are calculated from TKN and nitrate values.