

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
August 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-Aug-10	242.8	31	36	12	6	1,343	1.97	2.6	2.8	14	19	20	6.83	43	43
2-Aug-10	320.4	17	14	5	3	849	1.37	1.9	2.7	11	19	21	6.65	24,000	24,000
3-Aug-10	255.0	9	11	3	4	1,086	1.89	2.2	2.7	13	18	20	6.61	93	43
4-Aug-10	282.6	24	25	9	9	2,659	2.30	2.8	2.7	20	19	20	6.80	43	23
5-Aug-10	233.3	7	15	5	8	1,936	2.25	2.7	2.8	19	19	20	6.64	93	93
6-Aug-10	198.1	8	10	3	9	1,688	2.68	2.8	2.8	20	19	20	6.66	93	43
7-Aug-10	182.3	5	<10	4	7	1,342	2.85	3.1	2.8	21	19	20	6.85	43	43
8-Aug-10	176.2	11	14	3	6	1,087	3.09	3.4	2.8	21	19	21	6.69	23	9
9-Aug-10	185.6	8	11	3	6	1,188	3.22	3.6	2.8	22	18	20	6.46	930	430
10-Aug-10	190.1	8	14	3	7	1,319	3.12	3.6	2.8	21	18	21	6.37	430	93
11-Aug-10	195.0	8	17	4	8	1,464	2.85	3.3	2.8	20	18	21	6.56	930	430
12-Aug-10	191.6	17	26	7	10	1,868	3.02	3.5	2.8	22	18	21	6.51	150	93
13-Aug-10	500.5	48	34	9	4	1,932	1.25	2.0	2.8	13	18	21	6.58	(>11,000)	(11,000)
14-Aug-10	348.0	8	<10	4	2	832	1.16	1.4	2.8	13	18	20	7.10	4,300	4,300
15-Aug-10	469.3	42	32	14	2	849	0.91	1.4	2.7	11	18	18	6.89	(2,300)	(2,300)
16-Aug-10	336.9	8	9	2	2	785	1.33	1.7	2.7	12	18	18	7.16	930	230
17-Aug-10	265.5	6	8	2	4	1,102	1.77	2.1	2.7	14	18	19	6.92	2,300	430
18-Aug-10	233.1	7	<10	3	5	1,163	1.69	2.1	2.7	15	18	19	6.99	1,500	930
19-Aug-10	217.9	8	8	<2	5	1,046	2.12	2.3	2.7	17	18	19	6.95	150	93
20-Aug-10	228.1	8	12	3	5	1,241	2.21	2.5	2.7	16	18	20	6.84	750	460
21-Aug-10	208.9	5	11	3	4	779	2.22	2.3	2.6	16	18	20	6.68	750	210
22-Aug-10	187.2	5	<10	<2	3	629	2.76	2.9	2.7	18	18	20	6.74	64	38
23-Aug-10	194.1	7	<10	3	4	759	2.85	3.3	2.7	17	18	20	6.63	93	93
24-Aug-10	185.4	8	12	3	6	1,051	2.92	3.4	2.7	19	18	19	6.70	43	23
25-Aug-10	181.9	8	13	3	6	1,137	2.84	3.3	2.7	20	18	20	6.72	23	23
26-Aug-10	180.0	8	15	3	7	1,296	3.13	3.6	2.8	20	18	20	6.59	230	93
27-Aug-10	180.7	8	15	3	7	1,272	3.38	3.7	2.8	19	18	20	6.89	150	93
28-Aug-10	211.4	12	19	3	7	1,581	3.28	3.7	2.8	19	17	20	6.73	75	43
29-Aug-10	170.5	6	12	3	5	793	2.85	3.1	2.8	19	17	19	6.56	430	75
30-Aug-10	349.1	150	94	28	5	1,683	1.66	3.7	2.8	18	17	20	6.57	(>110,000)	(>110,000)
31-Aug-10	478.4	19	<10	5	5	2,373	0.68	0.9	2.7	11	17	19	6.94	(9,300)	(4,300)
Max:	501														
Min:	171														
Average:	251	17	17	5	6	1,295	2.31	2.7		17		20	6.74		
Geo.Mean:														238	126

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.