

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
July 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-Jul-10	209.7	8	11	4	18	3,775	2.63	2.7	2.0	25	17	19	6.94	9	4
2-Jul-10	196.5	12	16	3	17	3,262	2.13	2.5	2.1	25	17	19	6.94	4	4
3-Jul-10	254.0	6	18	4	13	3,277	1.85	2.2	2.1	19	18	19	6.89	93	43
4-Jul-10	198.4	11	18	4	11	2,163	1.95	2.4	2.1	18	18	18	6.89	23	23
5-Jul-10	266.6	22	27	12	12	3,146	2.28	2.9	2.2	20	18	19	6.84	15	15
6-Jul-10	225.8	8	15	3	9	2,019	1.86	2.2	2.2	16	18	19	6.75	93	93
7-Jul-10	198.9	9	22	4	13	2,526	2.47	2.8	2.2	21	18	19	6.87	230	93
8-Jul-10	196.8	9	17	3	13	2,558	2.61	3.0	2.3	21	19	19	6.80	38	38
9-Jul-10	189.2	10	23	3	13	2,460	2.85	3.3	2.3	22	19	19	6.87	93	43
10-Jul-10	177.0	7	17	4	13	2,266	2.86	3.3	2.4	23	19	20	6.87	23	23
11-Jul-10	170.6	9	24	2	12	2,030	2.88	3.4	2.4	22	19	19	6.85	23	4
12-Jul-10	176.7	8	20	3	13	2,244	2.94	3.3	2.5	23	19	19	6.74	43	15
13-Jul-10	281.7	67	53	23	11	3,014	2.15	3.1	2.5	19	20	19	6.61	43	23
14-Jul-10	575.6	28	22	7	5	2,786	1.52	2.2	2.5	12	19	19	6.95	(46,000)	(46,000)
15-Jul-10	287.0	10	<10	3	7	1,866	1.59	2.0	2.5	15	19	19	6.89	(230)	(230)
16-Jul-10	220.3	8	11	2	8	1,855	2.07	2.5	2.5	17	19	19	6.89	93	93
17-Jul-10	335.6	22	nr	nr	7	2,279	1.53	2.1	2.5	15	19	19	6.94	150	93
18-Jul-10	272.2	11	11	3	4	1,214	1.66	2.0	2.5	14	19	18	6.89	230	230
19-Jul-10	226.2	10	15	4	6	1,350	2.27	2.8	2.5	18	19	19	6.86	150	150
20-Jul-10	226.2	12	15	4	9	1,988	2.52	3.0	2.6	21	19	19	6.77	750	93
21-Jul-10	207.9	13	24	5	8	1,686	2.34	2.9	2.6	20	19	19	6.70	230	93
22-Jul-10	285.4	41	45	16	9	2,512	2.15	3.0	2.6	19	19	20	6.76	230	93
23-Jul-10	289.8	11	17	4	5	1,536	1.52	1.9	2.6	16	19	20	6.68	2,300	2,300
24-Jul-10	203.2	12	13	4	6	1,217	2.14	2.5	2.6	18	19	20	6.95	230	93
25-Jul-10	185.2	11	16	4	6	1,050	2.54	3.0	2.6	19	19	20	6.46	230	93
26-Jul-10	195.8	18	22	5	7	1,463	2.77	3.2	2.6	20	19	20	6.64	930	210
27-Jul-10	277.0	14	23	7	6	1,770	1.82	2.3	2.7	16	19	19	6.64	4,300	1,500
28-Jul-10	195.2	11	17	4	8	1,622	2.24	2.6	2.7	22	19	19	6.62	38	38
29-Jul-10	190.5	14	18	4	11	2,096	2.76	3.2	2.7	24	19	20	6.67	93	43
30-Jul-10	191.3	12	16	4	13	2,391	3.18	3.5	2.7	23	19	20	6.68	150	75
31-Jul-10	166.6	10	12	4	8	1,363	3.01	3.5	2.8	20	19	21	6.67	93	43
Max:	576														
Min:	167														
Average:	235	15	19	5	10	2,154	2.29	2.8		19		19	6.79		
Geo.Mean:														105	57

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.