

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
June 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-Jun-09	314.9	43	31	15	12	3,873	1.77	2.7	2.8	14	20	14.2	7.00	21	11
2-Jun-09	279.2	<4	17	6	11	3,155	1.52	2.3	2.8	15	20	14.8	7.00	17	8
3-Jun-09	224.8	9	12	6	16	3,507	2.13	2.7	2.7	20	20	16.7	7.06	70	70
4-Jun-09	310.3	25	30	13	13	4,065	1.85	2.6	2.7	19	20	15.0	6.97	79	49
5-Jun-09	273.6	12	21	7	12	3,338	1.63	2.2	2.7	17	20	13.5	7.20	49	17
6-Jun-09	211.6	9	17	7	16	3,280	2.39	3.1	2.7	21	20	15.6	7.36	nr	nr
7-Jun-09	200.3	14	nr	nr	17	3,325	2.53	3.1	2.6	22	19	15.5	7.13	<2	<2
8-Jun-09	372.6	82	55	27	11	3,987	1.46	2.7	2.6	19	19	14.9	6.98	4	2
9-Jun-09	356.7	14	24	12	10	3,485	1.22	2.0	2.5	11	18	14.1	7.13	130	49
10-Jun-09	251.6	10	13	7	14	3,422	1.90	2.5	2.5	17	18	13.7	7.12	79	49
11-Jun-09	236.7	ns	ns	ns	ns	ns	ns	ns	2.5	ns	18	14.4	7.16	79	79
12-Jun-09	217.4	18	25	9	17	3,609	2.29	3.0	2.5	21	18	14.7	7.07	110	49
13-Jun-09	201.0	13	17	7	17	3,397	2.50	3.2	2.5	20	18	14.1	7.02	27	22
14-Jun-09	197.3	18	18	7	17	3,374	2.81	3.3	2.6	20	18	14.5	6.97	33	33
15-Jun-09	202.4	14	23	8	17	3,400	2.70	3.6	2.6	20	18	14.9	6.99	79	33
16-Jun-09	202.0	17	28	8	19	3,838	2.84	3.7	2.7	nr	18	15.7	7.08	49	49
17-Jun-09	205.3	14	25	8	18	3,778	2.77	3.7	2.7	22	19	16.8	7.05	130	27
18-Jun-09	197.1	12	30	8	19	3,725	2.97	4.0	2.8	23	19	17.4	6.89	79	49
19-Jun-09	196.3	<4	26	9	20	3,926	3.03	3.7	2.8	23	19	15.5	6.96	3,300	1,700
20-Jun-09	180.2	14	33	9	19	3,496	3.17	4.3	2.9	26	19	16.5	6.93	79	79
21-Jun-09	176.5	17	27	8	18	3,212	3.17	4.2	2.9	21	19	17.0	6.95	23	8
22-Jun-09	207.2	17	29	12	19	3,833	2.84	3.8	3.0	22	19	16.5	6.96	13,000	1,700
23-Jun-09	188.0	18	56	10	20	3,835	3.15	4.2	3.0	25	19	16.9	6.62	23	4
24-Jun-09	185.8	15	29	11	21	3,976	3.07	4.1	3.1	26	20	17.2	6.94	130	17
25-Jun-09	193.5	14	31	10	19	3,735	2.45	3.3	3.1	26	20	17.3	6.79	79	79
26-Jun-09	259.1	39	21	nr	16	4,146	2.16	3.4	3.2	23	20	17.4	7.35	70	70
27-Jun-09	682.4	83	43	18	4	2,777	0.43	1.4	3.1	11	20	17.2	6.81	(350000)	(13000)
28-Jun-09	482.5	19	25	8	7	3,542	0.87	1.5	3.1	13	20	16.0	7.24	(22)	(22)
29-Jun-09	301.2	<4	13	6	11	3,373	1.49	2.0	3.1	16	20	15.5	7.32	46	33
30-Jun-09	282.4	12	12	6	12	3,502	1.62	2.2	3.1	17	20	16.7	7.25	130	49
Max:	682														
Min:	177														
Average:	260	20	26	10	15	3,583	2.23	3.1		20		15.7	7.04		
Geo.Mean:														65	34

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.