

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
August 2008**

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-08	45.1	19	18	7	29	1,295	3.77	5.2	4.1	38	29	18	6.53	13,000	13,000
2-Aug-08	38.1	17	21	6	29	1,094	3.81	5.4	4.2	38	30	18	6.67	1,700	1,700
3-Aug-08	37.5	17	22	7	29	1,092	4.14	5.7	4.2	39	30	19	6.62	300	300
4-Aug-08	40.5	22	28	8	30	1,205	4.60	6.0	4.3	40	31	18	6.62	13	8
5-Aug-08	46.7	23	24	8	28	1,311	4.66	6.0	4.4	39	31	17	7.10	800	500
6-Aug-08	48.6	16	27	8	29	1,418	4.71	5.7	4.4	41	31	18	6.60	3,000	358
7-Aug-08	49.1	17	31	8	29	1,399	4.80	6.0	4.5	38	32	15	6.61	8,000	2,800
8-Aug-08	50.4	13	28	9	28	1,395	5.12	6.0	4.5	38	32	15	6.68	300	80
9-Aug-08	48.1	17	26	9	27	1,317	4.46	5.3	4.5	37	32	19	6.62	1,300	1,300
10-Aug-08	47.9	20	27	12	29	1,409	4.30	5.3	4.6	38	33	18	6.76	300	170
11-Aug-08	62.2	34	33	15	25	1,549	4.25	5.4	4.6	36	33	na	6.57	1,300	800
12-Aug-08	163.0	40	35	16	4	619	0.23	2.1	4.6	16	33	18	7.13	(170,000)	(170,000)
13-Aug-08	84.9	21	29	8	14	1,223	2.73	3.7	4.6	21	33	18	6.89	800	800
14-Aug-08	67.4	24	34	9	19	1,308	3.74	4.3	4.6	27	33	19	6.75	305	70
15-Aug-08	63.4	22	38	9	22	1,369	3.94	4.6	4.6	29	33	19	6.70	500	130
16-Aug-08	56.9	13	40	8	22	1,235	3.31	3.9	4.6	29	33	19	6.76	130	80
17-Aug-08	56.7	17	37	7	22	1,237	3.44	4.0	4.6	28	33	25	6.67	300	33
18-Aug-08	58.8	13	66	6	23	1,330	3.99	4.7	4.6	31	33	22	6.71	220	170
19-Aug-08	56.6	11	64	6	23	1,307	4.12	4.7	4.6	31	33	19	6.68	280	110
20-Aug-08	55.5	11	49	8	24	1,303	4.55	5.3	4.6	32	33	20	6.60	22	9
21-Aug-08	65.8	23	67	15	22	1,435	4.59	5.6	4.7	27	33	20	6.54	280	12
22-Aug-08	129.9	19	30	13	10	1,338	1.31	1.6	4.6	17	32	21	6.84	(1,300)	(170)
23-Aug-08	81.8	8	35	5	13	1,079	2.02	2.3	4.5	21	32	20	6.92	130	80
24-Aug-08	65.9	16	nr	nr	17	1,095	3.06	3.7	4.5	26	32	21	6.77	80	80
25-Aug-08	66.3	12	58	7	18	1,168	3.97	4.9	4.6	26	32	19	6.66	110	80
26-Aug-08	62.2	11	68	7	18	1,138	4.17	5.0	4.6	28	32	19	6.62	230	130
27-Aug-08	60.8	10	75	5	19	1,131	4.84	5.5	4.7	32	32	19	6.61	800	44
28-Aug-08	57.9	9	76	6	20	1,182	2.40	5.8	4.7	34	32	19	6.71	130	17
29-Aug-08	57.4	9	51	6	20	1,148	5.06	5.7	4.8	32	31	19	6.53	110	50
30-Aug-08	52.2	5	48	7	19	992	4.10	4.6	4.8	31	31	19	6.62	17	17
31-Aug-08	49.7	4	36	5	18	895	3.81	4.3	4.8	32	31	19	6.63	130	50
Max:	163.0														
Min:	37.5														
Average:	62.2	17	41	8	22	1,226	3.81	4.8		31		19	6.70		
Geo.Mean:														316	132

- 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 98.6 ML/D per clause 26 of Licence 2716.
 - (6) Bracketed Coliform results not used in the Geometric Mean calculation.
 - (7) Raw wastewater flows in excess of 100 ML/D will by-pass the secondary process.