

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
September, 2007**

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-Sep-07	46.3	8	18	4	24	1,112	3.63	4.2	4.4	30	29	20	6.72	8	2
2-Sep-07	44.7	nr	nr	nr	nr	nr	nr	nr	4.4	nr	29	20	7.05	2	<2
3-Sep-07	53.3	18	31	8	24	1,279	4.17	4.2	4.4	26	29	19	NA	1,700	220
4-Sep-07	52.0	8	28	6	23	1,197	3.46	4.5	4.4	29	28	18	6.60	330	79
5-Sep-07	51.0	11	31	6	25	1,274	3.91	4.5	4.4	29	28	20	6.64	70	13
6-Sep-07	52.0	12	36	6	28	1,455	4.86	4.9	4.4	30	28	20	6.77	130	49
7-Sep-07	50.9	15	29	7	28	1,424	3.70	4.2	4.4	31	28	20	6.68	110	49
8-Sep-07	50.0	13	33	7	28	1,401	3.24	3.5	4.3	30	28	20	6.68	11	8
9-Sep-07	51.1	20	54	8	28	1,430	3.77	4.8	4.3	33	28	19	6.71	23	5
10-Sep-07	52.5	24	63	12	28	1,469	4.62	6.0	4.4	33	29	19	6.55	350	130
11-Sep-07	50.2	nr	35	9	28	1,406	3.29	3.1	4.4	26	29	19	6.61	540	17
12-Sep-07	50.4	4	55	7	29	1,463	3.98	4.7	4.4	30	29	19	6.54	120	26
13-Sep-07	51.7	18	62	9	27	1,395	4.93	5.8	4.5	31	29	19	6.70	110	23
14-Sep-07	50.6	24	49	10	28	1,418	5.74	5.5	4.5	30	29	19	6.58	240	79
15-Sep-07	50.7	36	37	10	26	1,318	4.36	4.6	4.5	31	29	19	6.84	8	5
16-Sep-07	51.4	16	31	8	24	1,233	3.77	3.4	4.5	27	29	19	6.80	170	110
17-Sep-07	51.5	23	30	< 4	25	1,288	4.86	4.8	4.5	29	29	19	6.67	350	33
18-Sep-07	50.0	17	25	10	26	1,299	3.81	3.8	4.5	31	29	19	6.79	(1,600,000)	(160,000)
19-Sep-07	48.6	10	21	5	27	1,312	3.04	3.0	4.5	30	30	19	6.64	350	350
20-Sep-07	54.2	10	24	5	27	1,463	4.44	4.1	4.5	27	30	19	6.66	170	33
21-Sep-07	51.0	9	22	6	26	1,326	4.39	nr	4.5	27	30	19	6.68	310	79
22-Sep-07	50.6	12	25	6	26	1,315	4.38	3.8	4.5	27	30	19	6.82	13	8
23-Sep-07	52.6	14	26	8	24	1,262	4.31	4.0	4.5	26	30	19	6.97	49	33
24-Sep-07	80.9	13	22	7	16	1,294	2.58	nr	4.5	18	29	19	6.81	350	240
25-Sep-07	57.6	7	17	4	18	1,038	2.29	2.7	4.4	24	29	19	6.72	33	33
26-Sep-07	53.0	8	23	4	22	1,166	3.99	4.4	4.4	29	29	19	6.69	920	26
27-Sep-07	53.5	8	29	5	24	1,284	4.45	4.2	4.3	32	29	20	6.65	170	17
28-Sep-07	52.5	7	22	6	22	1,155	4.63	4.7	4.3	29	29	18	6.65	33	33
29-Sep-07	52.0	7	22	5	23	1,196	3.99	3.7	4.3	28	29	19	6.86	5	<2
30-Sep-07	54.0	7	25	6	24	1,296	3.97	3.9	4.3	28	29	19	6.82	5	5
Max:	80.9														
Min:	44.7														
Average:	52.3	14	32	7	25	1,309	4.02	4.26		29		19	6.72		
Geo.Mean:														87	24

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.