

City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
March, 2006

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-Mar-06	47.2	6	15	6	ns	ns	ns	ns	4.1	ns	29	nr	6.59	nr	930,000
2-Mar-06	47.2	5	13	6	29	1,369	ns	4.1	4.0	33	29	nr	6.63	ns	ns
3-Mar-06	47.3	ns	ns	ns	ns	ns	ns	ns	4.0	ns	29	nr	6.60	ns	ns
4-Mar-06	49.8	ns	ns	ns	ns	ns	ns	ns	4.0	ns	29	nr	ns	ns	ns
5-Mar-06	50.4	11	46	10	28	1,411	ns	4.8	3.8	33	29	nr	ns	ns	ns
6-Mar-06	49.0	4	<10	6	ns	nr	ns	ns	3.8	ns	29	nr	6.64	ns	ns
7-Mar-06	48.4	6	<10	4	28	1,355	ns	4.4	3.7	34	29	nr	6.78	nr	430
8-Mar-06	49.1	6	12	4	ns	nr	ns	ns	3.7	ns	29	nr	6.63	nr	430
9-Mar-06	51.3	5	13	4	29	1,488	ns	3.8	3.6	31	29	nr	6.64	nr	1,500
10-Mar-06	51.1	ns	ns	ns	ns	ns	ns	ns	3.6	ns	29	nr	6.86	ns	ns
11-Mar-06	52.9	6	13	6	27	1,428	3.30	3.4	3.4	29	29	nr	6.94	ns	ns
12-Mar-06	52.8	4	11	5	26	1,373	3.12	3.0	3.4	28	29	13	6.92	23,000	23,000
13-Mar-06	49.5	4	14	5	26	1,287	3.34	3.9	3.3	33	29	nr	6.77	ns	ns
14-Mar-06	48.2	na	13	nr	28	1,350	3.30	3.7	3.1	34	29	nr	7.12	4,300	2,300
15-Mar-06	47.8	<4	14	5	29	1,386	3.67	4.2	3.2	35	29	nr	nr	9	9
16-Mar-06	48.1	5	15	7	30	1,443	3.94	3.7	3.1	29	29	nr	6.70	93	93
17-Mar-06	48.7	8	na	na	29	1,412	3.34	3.8	3.1	31	29	nr	nr	93	93
18-Mar-06	51.2	6	14	8	29	1,485	3.15	3.5	3.1	31	29	14	6.59	93	23
19-Mar-06	53.1	6	13	6	26	1,381	2.88	3.9	3.1	33	29	nr	6.82	150	75
20-Mar-06	50.3	5	13	5	25	1,258	2.84	4.5	3.1	32	29	nr	nr	750	750
21-Mar-06	50.9	5	12	5	27	1,374	3.12	4.5	3.1	32	29	nr	6.55	23	9
22-Mar-06	52.9	5	13	5	27	1,428	3.07	4.0	3.1	31	29	13	6.59	9	9
23-Mar-06	51.5	5	16	4	26	1,339	3.32	5.4	3.2	38	29	14	6.61	230	230
24-Mar-06	54.9	10	22	5	26	1,427	2.66	4.8	3.2	37	29	14	6.65	150	150
25-Mar-06	58.7	7	11	5	24	1,409	2.14	3.5	3.1	35	29	13	6.80	4	2
26-Mar-06	67.0	6	11	6	20	1,340	2.00	2.9	3.1	24	29	13	6.84	23	9
27-Mar-06	79.2	6	11	5	17	1,346	1.62	2.5	3.1	22	29	14	6.74	2,100	750
28-Mar-06	87.7	5	11	5	16	1,403	1.70	2.5	3.0	24	28	12	6.71	230	230
29-Mar-06	88.7	5	12	7	14	1,242	1.95	2.9	3.0	20	28	14	6.71	930	430
30-Mar-06	278.5	16	15	10	10	2,785	1.15	2.0	3.0	16	27	14	6.87	(23,000)	(9,300)
31-Mar-06	252.9	7	10	6	5	1,265	0.78	1.0	3.0	11	26	13	6.72	(230,000)	(93,000)
Total:	2116														
Max:	278.5														
Min:	47.2														
Average:	68.3	6.2	13.8	6	24	1,431	2.69	3.62		29		13	6.73		
Geo.Mean:														158	206

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.