

City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
July, 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-Jul-06	50.4	9	18	4	25	1,260	3.23	4.1	4.6	34	32	19	6.73	43	15
2-Jul-06	45.6	6	12	2	24	1,094	3.04	2.9	4.6	31	32	18	6.73	93	23
3-Jul-06	50.2	7	20	4	24	1,205	3.58	4.2	4.6	46	33	19	6.75	23	4
4-Jul-06	52.5	4	22	3	25	1,313	3.84	4.4	4.6	34	33	20	6.47	93	43
5-Jul-06	51.7	6	17	4	25	1,293	4.42	4.1	4.6	33	33	20	6.58	38	38
6-Jul-06	51.9	10	nr	nr	26	1,349	4.96	4.9	4.6	33	33	21	6.54	150	28
7-Jul-06	51.5	11	22	6	26	1,339	5.20	4.9	4.7	31	33	22	6.71	930	430
8-Jul-06	49.1	8	16	4	24	1,178	2.18	2.3	4.5	29	33	19	6.75	930	430
9-Jul-06	48.4	7	<10	7	24	1,162	2.46	2.5	4.3	31	33	19	6.91	<3	<3
10-Jul-06	51.4	6	12	4	25	1,285	3.17	3.5	4.3	32	33	19	6.55	430	150
11-Jul-06	50.5	6	nr	nr	26	1,313	3.64	3.8	4.3	31	33	17	6.53	23	4
12-Jul-06	52.0	5	<10	3	26	1,352	3.56	3.5	4.3	28	33	22	6.49	43	43
13-Jul-06	54.2	7	20	5	25	1,355	3.99	4.2	4.3	30	33	22	6.49	430	430
14-Jul-06	51.4	4	17	4	24	1,234	3.60	4.1	4.1	29	32	20	6.40	930	430
15-Jul-06	47.7	4	<10	3	24	1,145	3.14	3.3	4.0	29	32	20	6.95	<3	<3
16-Jul-06	47.7	5	12	4	24	1,145	3.00	3.5	3.9	28	32	20	6.69	43	43
17-Jul-06	51.2	8	15	3	25	1,280	3.31	3.8	3.9	30	32	20	6.40	43	9
18-Jul-06	50.3	4	13	4	25	1,258	3.52	3.9	3.9	28	32	20	6.42	93	93
19-Jul-06	49.3	6	11	3	26	1,282	3.04	3.7	3.9	28	32	20	6.31	43	43
20-Jul-06	49.5	45	15	6	25	1,238	0.11	2.7	3.8	29	32	20	6.43	93	23
21-Jul-06	49.8	47	14	2	25	1,245	<0.04	1.8	3.7	28	32	20	6.42	93	93
22-Jul-06	47.7	45	15	<2	25	1,193	<0.04	1.2	3.7	25	32	20	6.52	9	9
23-Jul-06	48.9	16	12	3	24	1,174	1.05	2.6	3.6	28	32	20	nr	43	4
24-Jul-06	50.8	7	14	3	22	1,118	1.75	3.2	3.6	32	32	22	6.44	3,800	3,800
25-Jul-06	53.8	8	23	5	22	1,184	3.18	5.5	3.7	37	32	22	6.48	1,200	1,200
26-Jul-06	56.8	8	11	4	20	1,136	1.38	1.9	3.6	20	31	21	6.81	230,000	93,000
27-Jul-06	51.2	52	<10	4	20	1,024	<0.04	1.3	3.5	20	31	23	6.77	4,300	4,300
28-Jul-06	51.6	22	<10	<2	20	1,032	<0.04	0.6	3.3	23	30	22	6.69	21,000	12,000
29-Jul-06	46.5	17	<10	<2	20	930	<0.04	0.4	3.2	23	30	19	6.56	43	9
30-Jul-06	48.4	22	<10	<2	19	920	<0.04	0.3	3.1	23	29	19	6.52	15	15
31-Jul-06	51.7	13	16	<2	20	1,034	<0.04	0.4	3.0	22	29	19	6.30	15,000	9,300
Total:	1564														
Max:	57														
Min:	45.6														
Average:	50.4	14	13	4	24	1,196	3.10	3.01		29		20	6.58		
Geo.Mean:														163	76

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.