

**City of Winnipeg  
Water and Waste Department  
South End Water Pollution Control Centre Monitoring Data  
October, 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-Oct-06	54.6	6	16	5	27	1,474	3.66	4.0	4.2	31	29	18	6.83	21	11
2-Oct-06	54.2	4	17	4	25	1,355	3.13	3.6	4.1	31	29	19	6.98	930	210
3-Oct-06	51.1	<4	24	3	27	1,380	3.46	3.8	4.0	32	29	19	6.69	430	93
4-Oct-06	51.8	10	34	10	28	1,450	4.40	4.3	4.0	29	29	19	6.72	15,000	2,100
5-Oct-06	51.9	5	18	3	26	1,349	4.44	5.1	4.0	34	30	19	6.87	93	93
6-Oct-06	51.4	<4	nr	nr	27	1,388	4.81	nr	4.0	nr	30	19	6.72	93	93
7-Oct-06	51.9	5	20	4	26	1,349	4.24	4.9	4.1	33	30	19	6.80	38	14
8-Oct-06	49.0	5	15	4	24	1,176	3.82	4.4	4.1	31	30	19	6.78	15	15
9-Oct-06	51.9	13	21	5	25	1,298	4.03	4.7	4.1	32	30	19	6.86	43	43
10-Oct-06	55.7	4	18	5	25	1,393	3.82	4.8	4.1	34	30	19	6.73	2,300	930
11-Oct-06	52.1	4	17	4	27	1,407	3.60	4.2	4.1	33	31	18	6.58	930	930
12-Oct-06	54.0	4	23	4	27	1,458	4.20	4.9	4.1	33	31	17	6.65	210	210
13-Oct-06	53.0	4	22	4	26	1,378	4.71	5.0	4.1	34	31	17	6.89	2,300	2,300
14-Oct-06	53.0	7	29	4	27	1,431	4.50	5.3	4.2	41	31	17	6.64	43	43
15-Oct-06	54.5	7	29	5	25	1,363	4.03	4.2	4.1	29	31	17	6.63	23	23
16-Oct-06	59.1	5	28	6	21	1,241	3.37	4.1	4.1	28	31	18	6.90	4,300	750
17-Oct-06	57.2	4	25	5	20	1,144	2.89	3.6	4.1	28	31	18	6.97	930	430
18-Oct-06	53.5	11	26	5	22	1,177	3.55	4.0	4.1	31	31	17	6.89	230	230
19-Oct-06	53.0	<4	33	4	23	1,219	4.13	4.9	4.1	34	31	17	6.78	430	150
20-Oct-06	53.0	5	28	4	24	1,272	4.69	5.3	4.2	33	31	15	6.66	43	43
21-Oct-06	52.7	11	33	7	24	1,265	4.49	5.0	4.3	32	32	nr	6.59	93	93
22-Oct-06	54.7	11	38	8	23	1,258	4.24	4.9	4.3	31	32	17	6.93	150	28
23-Oct-06	53.9	9	26	5	23	1,240	3.58	4.3	4.3	29	32	16	6.91	2,300	430
24-Oct-06	51.6	4	33	4	23	1,187	3.70	3.9	4.3	29	31	16	6.81	430	150
25-Oct-06	51.8	6	30	5	24	1,243	4.33	4.8	4.3	31	32	16	6.65	150	23
26-Oct-06	51.7	6	30	5	24	1,241	4.51	4.9	4.4	34	32	16	6.59	930	430
27-Oct-06	49.7	8	34	7	24	1,193	5.04	5.5	4.4	34	32	16	6.89	930	430
28-Oct-06	53.5	6	27	4	24	1,284	3.92	nr	4.4	nr	32	16	6.93	230	230
29-Oct-06	52.6	8	29	5	23	1,210	3.96	4.4	4.5	32	32	16	6.87	43	4
30-Oct-06	53.1	7	30	5	23	1,221	3.90	4.3	4.5	30	32	17	6.75	1,500	150
31-Oct-06	49.9	4	24	4	25	1,248	4.19	4.6	4.5	32	32	16	ns	430	28
<b>Max:</b>	59														
<b>Min:</b>	49.0														
<b>Average:</b>	<b>52.9</b>	<b>6</b>	<b>26</b>	<b>5</b>	<b>25</b>	<b>1,300</b>	<b>4.04</b>	<b>4.54</b>		<b>32</b>		<b>17</b>	<b>6.78</b>		
<b>Geo.Mean:</b>														<b>277</b>	<b>118</b>

**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.