

**City of Winnipeg  
Water and Waste Department  
South End Water Pollution Control Centre Monitoring Data  
April 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-Apr-08	54.3	35	33	20	25	1,357	4.34	5.4	5.4	31	31	12	6.83	7,400	7,400
2-Apr-08	59.7	39	35	23	26	1,552	4.72	9.4	5.6	35	31	13	6.80	3,600	3,600
3-Apr-08	73.8	48	42	24	21	1,549	3.96	5.2	5.7	31	32	12	6.84	3,600	3,600
4-Apr-08	65.0	36	33	26	19	1,235	3.03	4.2	5.7	25	31	8	7.08	3,600	3,600
5-Apr-08	56.7	24	32	19	23	1,304	3.19	4.2	5.7	26	31	12	7.12	9,200	2,300
6-Apr-08	54.7	29	33	22	26	1,423	3.45	4.4	5.6	31	31	12	6.79	2,300	2,300
7-Apr-08	56.1	25	36	22	27	1,513	4.05	5.1	5.6	33	31	13	6.77	9,200	2,300
8-Apr-08	61.9	29	26	15	27	1,670	4.77	5.2	5.6	33	31	12	6.78	920	920
9-Apr-08	63.5	18	24	14	25	1,589	4.41	5.2	5.5	33	32	12	6.79	23,000	23,000
10-Apr-08	63.7	18	26	14	25	1,580	4.30	5.6	5.5	33	32	nr	6.86	9,200	9,200
11-Apr-08	60.9	27	22	15	24	1,462	4.45	5.3	5.5	33	32	13	6.84	920	920
12-Apr-08	57.9	19	23	15	26	1,506	3.84	4.7	5.5	35	32	13	6.87	2,300	3,600
13-Apr-08	57.5	21	22	13	27	1,557	3.86	4.5	5.4	33	32	13	6.74	1,500	1,500
14-Apr-08	60.5	20	26	14	26	1,598	4.27	5.1	5.4	35	32	13	6.70	920	920
15-Apr-08	65.2	14	19	12	25	1,655	4.19	7.3	5.5	32	32	10	6.83	2,300	2,300
16-Apr-08	61.3	14	20	10	26	1,619	5.00	5.6	5.5	33	32	13	6.80	92	92
17-Apr-08	56.9	13	20	9	28	1,609	5.39	6.4	5.5	37	32	13	6.89	920	36
18-Apr-08	54.2	11	17	10	30	1,600	5.43	6.0	5.5	32	33	14	6.83	36	36
19-Apr-08	54.0	6	18	9	28	1,507	4.49	5.1	5.5	32	33	14	6.74	740	740
20-Apr-08	55.4	8	15	8	29	1,611	4.23	4.7	5.4	32	33	14	6.75	92	92
21-Apr-08	62.1	8	21	10	28	1,763	4.22	4.6	5.4	31	33	14	6.76	230	230
22-Apr-08	61.2	8	16	8	28	1,696	4.05	4.4	5.4	29	33	ns	ns	ns	ns
23-Apr-08	54.1	6	16	6	30	1,640	4.95	5.3	5.4	31	33	13	6.75	230	230
24-Apr-08	78.4	19	24	12	26	2,014	4.19	4.7	5.3	27	33	ns	ns	ns	ns
25-Apr-08	66.6	20	12	7	22	1,459	3.47	3.9	5.2	21	32	12	6.85	2,300	2,300
26-Apr-08	58.3	11	12	8	27	1,579	3.90	4.3	5.1	32	32	13	6.91	720	720
27-Apr-08	58.1	10	nr	nr	28	1,651	4.00	4.3	5.1	33	32	13	6.85	360	360
28-Apr-08	56.4	8	18	7	27	1,540	4.48	4.9	5.1	36	31	13	6.73	360	360
29-Apr-08	54.0	8	20	7	nr	nr	nr	5.6	5.2	nr	31	13	6.87	98	98
30-Apr-08	53.9	10	19	8	29	1,557	5.36	5.9	5.2	36	32	13	6.76	36	23
<b>Max:</b>	78.4														
<b>Min:</b>	53.9														
<b>Average:</b>	<b>60.3</b>	<b>19</b>	<b>23</b>	<b>13</b>	<b>26</b>	<b>1,565</b>	<b>4.28</b>	<b>5.2</b>		<b>32</b>		<b>12</b>	<b>6.83</b>		
<b>Geo.Mean:</b>														<b>989</b>	<b>798</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.
- (8) Total Phosphorus and Total Nitrogen are corrected based on the recovery of a quality control standard.