

**City of Winnipeg**  
**Water and Waste Department**  
**South End Water Pollution Control Centre Monitoring Data**  
**March, 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-Mar-07	45.4	10	17	6	35	1,589	4.91	5.4	4.9	38	35	14	6.71	1,600	1,600
2-Mar-07	46.9	13	21	9	30	1,407	4.85	5.1	4.9	32	35	14	6.79	24,000	24,000
3-Mar-07	48.9	8	15	7	30	1,467	3.53	4.0	4.9	33	34	13	6.88	540	540
4-Mar-07	48.7	13	18	9	29	1,412	4.55	5.1	5.0	43	35	14	6.97	54,000	24,000
5-Mar-07	45.1	11	16	6	29	1,308	3.33	3.9	4.9	32	35	14	6.93	35,000	35,000
6-Mar-07	45.5	7	13	6	32	1,456	4.16	4.7	4.9	39	35	14	7.17	9,200	9,200
7-Mar-07	45.1	9	15	6	31	1,398	4.01	4.3	4.9	35	35	15	6.72	3,500	3,500
8-Mar-07	46.9	9	13	7	31	1,453	4.40	4.7	4.9	34	35	15	6.82	35,000	16,000
9-Mar-07	48.4	11	51	nr	28	1,356	4.68	5.3	4.9	34	35	14	6.88	1,600	1,600
10-Mar-07	51.7	10	13	8	29	1,498	3.24	3.9	4.9	34	35	13	6.85	1,600	1,600
11-Mar-07	52.0	10	13	7	27	1,403	3.01	3.5	4.8	31	34	13	6.89	3,500	3,500
12-Mar-07	59.9	14	17	9	26	1,556	3.16	4.1	4.8	32	34	14	6.88	35,000	35,000
13-Mar-07	64.8	10	<10	6	22	1,426	2.34	2.8	4.7	25	34	14	7.10	3,500	3,500
14-Mar-07	52.8	9	13	6	23	1,214	3.04	3.3	4.6	26	34	14	6.79	1,600	920
15-Mar-07	48.7	8	11	6	28	1,364	4.03	4.7	4.6	34	34	13	7.02	1,600	1,600
16-Mar-07	49.0	5	11	5	29	1,420	4.34	4.5	4.6	33	34	14	7.07	540	540
17-Mar-07	50.6	9	12	7	30	1,518	4.54	4.4	4.6	32	33	13	7.01	130	130
18-Mar-07	54.8	7	16	9	27	1,478	3.92	4.2	4.6	31	33	13	6.88	5,400	3,500
19-Mar-07	50.8	5	11	6	26	1,320	3.42	3.7	4.5	30	33	13	6.95	16,000	920
20-Mar-07	50.6	5	12	5	29	1,468	4.06	4.3	4.5	31	33	13	7.08	540	540
21-Mar-07	62.2	6	<10	5	26	1,616	3.51	3.8	4.5	29	33	14	7.04	79	79
22-Mar-07	53.6	7	<10	5	24	1,287	3.45	4.1	4.5	28	33	12	7.12	540	540
23-Mar-07	61.8	7	11	6	26	1,607	4.00	4.7	4.4	30	33	13	6.81	5,400	5,400
24-Mar-07	78.8	12	14	8	19	1,498	2.52	3.2	4.4	23	32	12	6.87	920	920
25-Mar-07	<b>112.8</b>	27	31	21	13	1,466	1.67	2.5	4.3	17	32	12	7.24	(540)	(540)
26-Mar-07	<b>125.4</b>	22	23	13	10	1,254	1.55	2.2	4.2	15	31	13	6.93	(920)	(920)
27-Mar-07	91.9	10	12	8	13	1,194	2.04	2.7	4.1	19	31	13	6.78	280	280
28-Mar-07	98.6	23	24	14	13	1,282	1.88	2.6	4.0	20	30	14	6.89	920	920
29-Mar-07	<b>168.6</b>	31	28	17	8	1,349	1.59	1.9	3.9	14	30	13	7.29	(92,000)	(92,000)
30-Mar-07	98.3	4	8	5	13	1,277	2.12	2.6	3.9	17	29	14	7.21	>1600	>1600
31-Mar-07	<b>101.2</b>	10	12	8	13	1,316	1.90	2.4	3.8	18	28	11	7.07	(>1600)	(>1600)
<b>Max:</b>	168.6														
<b>Min:</b>	45.1														
<b>Average:</b>	<b>60.4</b>	<b>11</b>	<b>16</b>	<b>8</b>	<b>24</b>	<b>1,408</b>	<b>3.35</b>	<b>3.83</b>		<b>29</b>		<b>13</b>	<b>6.96</b>		
<b>Geo.Mean:</b>														<b>2,500</b>	<b>2,030</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.