

**City of Winnipeg  
Water and Waste Department  
South End Water Pollution Control Centre Monitoring Data**

**April 2011**

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-11	93.3	28	30	12	17	1,586	2.01	2.7	4.0	23	35	11	6.78	75	75
2-Apr-11	<b>109.9</b>	60	45	18	14	1,484	1.53	2.5	3.9	21	34	10	6.80	(15)	(15)
3-Apr-11	<b>186.2</b>	90	55	29	8	1,488	0.96	2.1	3.8	17	34	10	7.15	(4,300)	(4,300)
4-Apr-11	<b>142.4</b>	24	23	14	11	1,495	1.29	1.8	3.7	17	33	10	7.32	(430)	(430)
5-Apr-11	<b>130.3</b>	22	21	15	12	1,498	1.41	2.1	3.6	18	32	10	7.33	(230)	(230)
6-Apr-11	<b>135.0</b>	27	23	14	12	1,607	1.92	2.4	3.6	19	31	10	7.22	(75)	(38)
7-Apr-11	<b>155.7</b>	32	28	22	11	1,744	1.62	2.0	3.5	16	30	9	7.28	(1,200)	(380)
8-Apr-11	<b>168.2</b>	47	30	19	9	1,462	1.12	1.7	3.4	14	29	ns	ns	ns	ns
9-Apr-11	<b>198.1</b>	22	18	12	8	1,599	0.99	1.3	3.3	14	29	ns	ns	ns	ns
10-Apr-11	<b>149.0</b>	20	23	18	9	1,387	1.13	1.5	3.1	15	28	ns	ns	ns	ns
11-Apr-11	<b>144.2</b>	15	17	13	10	1,456	1.28	1.6	3.0	16	27	ns	ns	ns	ns
12-Apr-11	<b>127.0</b>	15	12	8	12	1,473	1.43	1.7	3.0	17	26	ns	ns	ns	ns
13-Apr-11	<b>115.2</b>	10	11	8	13	1,521	1.71	1.8	2.9	19	25	ns	ns	ns	ns
14-Apr-11	<b>101.5</b>	11	15	9	15	1,523	1.74	2.0	2.8	21	25	ns	ns	ns	ns
15-Apr-11	94.7	9	12	6	16	1,477	1.78	2.1	2.6	20	24	ns	ns	ns	ns
16-Apr-11	<b>107.2</b>	18	18	12	15	1,554	1.58	1.9	2.6	19	23	ns	ns	ns	ns
17-Apr-11	<b>99.9</b>	13	13	10	16	1,558	1.62	1.9	2.5	20	23	ns	ns	ns	ns
18-Apr-11	92.2	6	15	6	16	1,512	1.81	2.1	2.4	20	22	ns	ns	ns	ns
19-Apr-11	90.1	14	12	7	16	1,468	1.96	2.2	2.4	20	22	ns	ns	ns	ns
20-Apr-11	79.0	4	<10	4	19	1,477	2.30	2.6	2.4	23	22	ns	ns	ns	ns
21-Apr-11	76.4	8	16	5	21	1,628	2.46	2.7	2.4	24	22	ns	ns	ns	ns
22-Apr-11	79.8	13	18	8	20	1,595	2.31	2.6	2.4	24	22	ns	ns	ns	ns
23-Apr-11	78.4	10	16	9	19	1,474	2.11	2.5	2.3	21	21	ns	ns	ns	ns
24-Apr-11	80.4	ns	ns	ns	ns	ns	ns	ns	2.3	ns	21	ns	ns	ns	ns
25-Apr-11	79.7	11	13	6	21	1,659	2.42	2.6	2.3	25	21	ns	ns	ns	ns
26-Apr-11	76.4	9	14	7	21	1,605	2.97	3.2	2.3	25	21	ns	ns	ns	ns
27-Apr-11	80.3	5	13	5	20	1,589	3.21	3.6	2.3	24	21	ns	ns	ns	ns
28-Apr-11	84.0	14	17	7	20	1,671	2.85	3.1	2.3	24	20	ns	ns	ns	ns
29-Apr-11	82.6	9	13	4	19	1,569	2.41	2.5	2.3	23	20	ns	ns	ns	ns
30-Apr-11	<b>128.5</b>	34	30	13	12	1,593	1.60	2.0	2.2	17	20	ns	ns	ns	ns
<b>Max:</b>	198.1														
<b>Min:</b>	76.4														
<b>Average:</b>	<b>112.2</b>	<b>21</b>	<b>20</b>	<b>11</b>	<b>15</b>	<b>1,543</b>	<b>1.85</b>	<b>2.2</b>		<b>20</b>		<b>10</b>	<b>7.13</b>		
<b>Geo.Mean:</b>														<b>75</b>	<b>75</b>

**Notes:**

- (1) effluent ammonia load based upon Raw Sewage flows and Final NH3-N concentrations (5)\*\* Flow, highlighted in bold, in excess of 98.6 ML/D per clause 26 of Licence 2716R.
- (2) nr - not recorded or no result; na - not analyzed; ns - no sample (6) Bracketed Coliform results not used in the Geometric Mean calculation.
- (3) Where value is expressed as less than (<), the value is halved and used in the calculation (7) Raw wastewater flows in excess of 100 ML/D will by-pass the secondary process.
- (4) \* = 30 day rolling average (8) Total Nitrogen results are calculated from TKN and nitrate values.