

**City of Winnipeg  
Water and Waste Department  
South End Water Pollution Control Centre Monitoring Data  
October, 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-Oct-07	52.9	5	26	5	24	1,271	3.95	3.6	4.3	25	29	18	6.87	110	22
2-Oct-07	51.5	10	21	5	27	1,391	5.19	3.9	4.2	24	28	19	6.73	33	33
3-Oct-07	51.4	6	29	3	27	1,388	3.94	3.7	4.2	28	28	18	6.69	240	240
4-Oct-07	50.8	5	24	4	26	1,322	4.24	3.9	4.2	29	28	19	6.73	33	33
5-Oct-07	50.8	6	22	3	26	1,322	4.36	5.1	4.2	35	29	17	6.71	8	5
6-Oct-07	50.3	5	23	4	29	1,459	4.58	4.7	4.2	31	29	19	6.93	na	na
7-Oct-07	48.6	5	27	4	25	1,214	4.11	4.7	4.2	37	29	19	6.86	<2	<2
8-Oct-07	79.5	24	nr	nr	19	1,510	3.42	3.8	4.2	28	29	19	6.76	<2	<2
9-Oct-07	76.3	5	19	4	16	1,221	2.01	1.6	4.1	21	28	17	6.86	490	490
10-Oct-07	55.1	6	29	4	22	1,212	3.82	3.6	4.1	24	28	18	6.69	11,000	790
11-Oct-07	56.3	7	31	4	25	1,409	4.57	5.1	4.1	32	28	16	6.90	68	14
12-Oct-07	54.0	4	27	3	25	1,351	4.89	5.3	4.1	29	28	18	6.74	260	46
13-Oct-07	54.8	6	26	4	25	1,370	4.71	4.1	4.1	23	28	18	6.86	5	5
14-Oct-07	55.4	17	48	23	24	1,330	4.21	4.6	4.1	29	28	18	6.86	<2	<2
15-Oct-07	53.9	13	47	9	25	1,347	4.36	4.4	4.1	30	28	18	6.76	7,900	2,200
16-Oct-07	51.9	10	31	5	26	1,349	3.74	4.2	4.0	30	28	19	6.69	1,300	330
17-Oct-07	53.0	10	30	4	27	1,430	6.00	3.2	4.0	21	28	18	6.68	11,000	11,000
18-Oct-07	61.7	11	32	6	26	1,604	4.41	3.9	4.0	25	28	19	6.87	930	93
19-Oct-07	98.1	9	26	7	14	1,373	1.89	1.2	3.9	8	27	16	6.82	(43,000)	(43,000)
20-Oct-07	64.9	4	23	5	19	1,232	2.65	2.8	3.9	20	27	17	6.94	4,300	2,400
21-Oct-07	60.7	10	24	8	21	1,275	3.23	3.2	3.9	22	26	17	6.98	9	<3
22-Oct-07	57.8	12	29	5	22	1,272	3.08	3.4	3.8	25	26	18	6.66	930	230
23-Oct-07	55.2	8	36	5	24	1,325	3.60	2.9	3.8	20	26	18	6.79	430	230
24-Oct-07	55.2	7	28	4	25	1,380	3.37	3.9	3.8	30	27	17	6.88	430	430
25-Oct-07	54.7	8	43	5	26	1,423	3.86	3.3	3.8	22	26	16	6.86	23	23
26-Oct-07	54.9	9	43	5	26	1,428	4.10	5.0	3.9	29	26	18	6.70	230	92
27-Oct-07	54.6	11	38	6	25	1,364	4.27	4.5	3.9	30	26	18	6.86	230	9
28-Oct-07	55.5	12	35	5	24	1,332	3.69	3.1	3.8	23	26	18	6.81	15	<3
29-Oct-07	54.0	11	44	5	23	1,243	3.43	3.8	3.8	21	26	18	6.70	230	43
30-Oct-07	52.1	15	39	5	25	1,302	4.04	3.4	3.8	18	26	18	6.89	230	9
31-Oct-07	52.6	11	42	5	24	1,263	4.01	3.9	3.8	29	26	18	6.81	150	74
<b>Max:</b>	98.1														
<b>Min:</b>	48.6														
<b>Average:</b>	<b>57.9</b>	<b>9</b>	<b>31</b>	<b>5</b>	<b>24</b>	<b>1,345</b>	<b>3.93</b>	<b>3.8</b>		<b>26</b>		<b>18</b>	<b>6.80</b>		
<b>Geo.Mean:</b>														<b>127</b>	<b>46</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.