

**City of Winnipeg**  
**Water and Waste Department**  
**South End Water Pollution Control Centre Monitoring Data**  
**May 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-May-08	52.7	8	23	8	30	1,576	6.03	6.4	5.3	29	32	13	6.88	230	230
2-May-08	50.4	9	18	8	31	1,538	5.54	6.0	5.1	35	32	14	6.74	36	36
3-May-08	53.8	10	16	8	30	1,620	4.48	5.2	5.1	39	32	14	6.88	2,300	2,300
4-May-08	58.9	13	24	12	30	1,756	4.42	5.0	5.2	38	32	14	6.80	74	74
5-May-08	56.4	10	25	11	27	1,517	4.04	4.7	5.2	35	33	14	6.76	150	150
6-May-08	53.5	6	18	7	28	1,513	4.49	5.1	5.2	34	33	14	6.82	92	92
7-May-08	52.9	8	19	7	30	1,571	4.72	5.2	5.2	35	33	14	6.79	360	360
8-May-08	52.2	12	23	11	31	1,619	5.08	5.6	5.2	38	33	14	6.69	360	360
9-May-08	52.3	19	28	19	31	1,638	5.21	5.6	5.2	40	33	13	6.87	93,000	93,000
10-May-08	52.8	10	14	7	29	1,509	4.26	4.7	5.2	36	33	14	6.69	230	230
11-May-08	53.1	6	17	6	29	1,513	4.17	4.8	5.2	36	33	13	6.70	280	280
12-May-08	74.9	ns	ns	ns	ns	ns	ns	ns	5.2	ns	33	13	6.70	28	28
13-May-08	84.4	11	17	7	17	1,426	2.61	3.0	5.2	22	33	12	6.98	(150,000)	(150,000)
14-May-08	63.3	7	<10	6	22	1,367	3.62	4.1	5.1	27	33	13	6.88	92	92
15-May-08	58.7	5	15	5	25	1,455	4.56	5.0	5.0	31	33	14	6.87	230	23
16-May-08	56.8	6	17	6	26	1,499	4.45	4.8	5.0	33	33	14	6.68	23	23
17-May-08	52.6	5	11	5	26	1,390	4.24	4.5	4.9	33	32	14	6.69	36	36
18-May-08	49.6	7	nr	nr	27	1,318	3.99	4.4	4.9	34	32	14	6.71	23	23
19-May-08	57.8	10	20	8	26	1,486	3.94	4.5	4.9	34	33	13	6.68	23	23
20-May-08	55.8	10	16	10	25	1,418	4.03	4.8	4.9	34	33	13	6.70	92	92
21-May-08	54.3	8	15	6	28	1,492	4.05	4.7	4.9	35	33	14	6.61	920	920
22-May-08	54.8	9	22	8	30	1,628	4.54	4.9	4.9	37	33	14	6.74	36	36
23-May-08	53.9	11	23	9	30	1,601	4.80	5.5	4.9	39	33	15	6.65	920	920
24-May-08	53.8	18	26	11	29	1,564	4.40	5.0	4.9	40	34	15	6.71	23	23
25-May-08	73.1	21	32	16	24	1,739	3.59	4.2	4.9	34	34	15	6.78	360	360
26-May-08	71.4	9	19	10	23	1,664	3.70	4.1	4.9	29	34	14	6.76	92	92
27-May-08	59.1	14	19	7	26	1,518	4.16	4.7	4.9	30	34	14	6.80	360	360
28-May-08	57.4	11	18	7	27	1,537	4.86	5.4	4.9	32	34	14	6.81	23	23
29-May-08	55.5	16	25	7	28	1,526	5.68	6.4	5.0	33	34	14	6.69	2,300	2,300
30-May-08	56.9	14	20	9	28	1,587	5.00	5.6	5.0	32	34	14	6.69	36	36
31-May-08	61.3	17	21	10	25	1,525	3.69	4.3	4.9	31	34	15	6.77	920	920
<b>Max:</b>	84.4														
<b>Min:</b>	49.6														
<b>Average:</b>	<b>57.9</b>	<b>11</b>	<b>20</b>	<b>9</b>	<b>27</b>	<b>1,537</b>	<b>4.41</b>	<b>4.9</b>		<b>34</b>		<b>14</b>	<b>6.76</b>		
<b>Geo.Mean:</b>														<b>168</b>	<b>155</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.