

**City of Winnipeg**  
**Water and Waste Department**  
**North 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	166.0	13	48	7	36	5,893	3.16	3.7	3.3	35	32	12	7.03	150	150
2-May-08	166.4	14	34	6	36	5,974	3.23	3.8	3.3	42	32	15	7.03	920	920
3-May-08	161.3	17	37	6	32	5,210	2.73	3.2	3.3	39	33	14	6.95	92	92
4-May-08	185.2	17	60	8	31	5,649	3.09	3.7	3.4	38	33	14	6.99	150	150
5-May-08	165.3	14	47	6	28	4,579	2.86	3.4	3.4	36	34	13	6.94	920	920
6-May-08	187.0	15	44	7	34	6,339	3.14	3.9	3.4	43	34	14	6.90	1,500	1,500
7-May-08	148.4	15	37	6	31	4,586	2.75	3.4	3.4	39	35	14	6.92	920	920
8-May-08	181.6	15	34	7	32	5,775	2.94	3.8	3.4	39	35	14	6.87	230	230
9-May-08	165.2	11	21	6	32	5,204	2.91	3.5	3.4	40	35	14	7.04	360	360
10-May-08	158.8	9	32	5	33	5,256	3.06	3.6	3.5	41	35	14	6.94	360	360
11-May-08	154.9	12	22	5	36	5,576	3.47	4.0	3.5	42	36	14	7.04	74	74
12-May-08	351.4	ns	ns	ns	ns	ns	ns	ns	3.5	ns	36	14	6.94	(>1100000)	(>1100000)
13-May-08	375.8	13	18	7	14	5,186	1.04	1.6	3.4	19	35	11	7.13	92	92
14-May-08	206.3	8	14	4	25	5,178	2.26	2.7	3.4	31	35	13	7.21	230	230
15-May-08	193.2	7	22	4	27	5,255	2.33	2.9	3.4	34	35	14	6.97	36	23
16-May-08	187.3	8	17	5	28	5,282	2.37	3.0	3.4	35	35	14	6.88	36	36
17-May-08	168.7	8	17	4	27	4,589	2.44	2.9	3.4	35	35	14	7.16	15	15
18-May-08	159.4	8	nr	nr	28	4,527	2.74	3.1	3.3	35	35	14	7.00	36	36
19-May-08	213.5	8	26	5	25	5,338	2.45	3.0	3.3	32	35	14	6.88	92	23
20-May-08	179.1	7	21	5	26	4,710	2.41	3.0	3.3	35	35	14	6.97	230	230
21-May-08	179.4	7	31	4	30	5,346	2.63	3.3	3.3	37	35	15	7.00	36	36
22-May-08	175.9	7	28	4	31	5,453	2.80	3.2	3.3	38	36	15	6.88	92	92
23-May-08	175.5	6	30	4	32	5,669	3.15	3.3	3.3	39	36	15	6.86	36	36
24-May-08	168.5	11	21	6	33	5,476	3.15	3.7	3.3	40	36	15	6.92	23	23
25-May-08	290.6	13	31	8	18	5,260	1.91	2.5	3.3	26	36	15	6.91	3,600	3,600
26-May-08	292.7	7	23	6	17	4,947	1.77	2.3	3.3	22	36	14	6.93	230	230
27-May-08	187.5	10	29	5	25	4,613	2.46	3.0	3.3	30	36	14	6.90	230	230
28-May-08	177.3	6	35	4	30	5,354	3.02	3.4	3.3	36	36	15	6.84	230	230
29-May-08	179.3	9	48	4	32	5,684	3.06	3.6	3.2	37	36	14	6.81	230	230
30-May-08	209.8	9	45	4	29	6,000	2.93	3.4	3.2	34	35	15	6.83	360	360
31-May-08	238.5	17	40	5	24	5,605	2.39	2.9	3.2	29	35	15	6.96	920	920
<b>Max:</b>	376														
<b>Min:</b>	148														
<b>Average:</b>	<b>198</b>	<b>11</b>	<b>31</b>	<b>5</b>	<b>29</b>	<b>5,317</b>	<b>2.69</b>	<b>3.2</b>		<b>35</b>		<b>14</b>	<b>6.96</b>		
<b>Geo.Mean:</b>														<b>173</b>	<b>163</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 380 ML/D per clause 26 of Licence 2684RR.
- (6) Bracketed Coliform results not used in the Geometric Mean calculation.
- (7) Raw wastewater flows in excess of 400 ML/D will by-pass the secondary process and flows in excess of 675 ML/D will cause raw sewage to by-pass the plant.
- (8) Total Phosphorus and Total Nitrogen results are corrected based on the recovery of a quality control standard.