

**City of Winnipeg**  
**Water and Waste Department**  
**North End Water Pollution Control Centre Monitoring Data**  
**February 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-Feb-08	158.2	21	35	9	35	5,537	3.94	5.4	4.5	46	35	14	6.89	920	230
2-Feb-08	144.7	19	37	9	36	5,209	4.06	4.8	4.5	46	36	13	6.94	2,300	2,300
3-Feb-08	143.2	24	55	9	36	5,155	4.34	4.6	4.5	39	36	14	6.91	360	360
4-Feb-08	148.7	17	64	10	35	5,205	4.26	5.3	4.5	47	36	14	6.93	3,600	3,600
5-Feb-08	146.9	27	48	9	29	4,260	4.26	5.7	4.6	49	37	14	6.87	920	920
6-Feb-08	150.2	23	38	8	35	5,257	4.15	5.4	4.7	47	37	14	6.92	230	230
7-Feb-08	148.9	18	39	9	34	5,063	3.97	4.9	4.7	45	38	14	6.85	1,500	1,500
8-Feb-08	153.3	18	45	10	32	4,906	3.86	5.0	4.7	43	38	14	6.83	360	230
9-Feb-08	148.9	19	36	10	33	4,914	4.00	5.3	4.7	45	38	14	7.06	1,500	1,500
10-Feb-08	144.0	23	37	9	35	5,040	4.33	5.1	4.7	45	38	14	7.54	1,500	740
11-Feb-08	149.7	20	56	10	32	4,790	4.01	5.0	4.7	44	39	14	6.87	360	360
12-Feb-08	149.5	19	33	9	34	5,083	3.93	4.6	4.8	44	39	14	6.99	2,300	2,300
13-Feb-08	148.8	16	33	9	32	4,762	3.94	4.6	4.8	44	40	12	6.88	360	360
14-Feb-08	148.0	19	31	8	32	4,736	4.12	5.2	4.8	45	40	13	6.87	2,300	2,300
15-Feb-08	144.4	20	31	8	34	4,910	4.07	5.0	4.9	41	40	13	6.89	920	920
16-Feb-08	150.4	16	36	9	33	4,963	3.91	5.1	4.8	40	40	13	6.85	230	230
17-Feb-08	141.6	14	38	10	32	4,531	3.78	4.5	4.9	43	41	13	7.21	360	360
18-Feb-08	142.0	19	46	9	33	4,686	4.22	4.9	4.9	47	41	13	7.19	3,600	3,600
19-Feb-08	146.3	21	48	9	32	4,682	nr	5.2	4.9	43	41	13	6.94	2,300	2,300
20-Feb-08	149.0	23	47	9	37	5,513	4.31	5.5	4.9	45	41	13	6.98	920	920
21-Feb-08	151.9	23	40	9	37	5,620	4.03	5.0	4.9	47	42	13	7.07	360	360
22-Feb-08	152.1	20	nr	nr	35	5,324	3.75	4.8	4.9	41	42	13	6.86	360	360
23-Feb-08	144.9	19	32	10	29	4,202	3.27	5.4	5.0	36	42	13	6.84	92	92
24-Feb-08	142.3	23	35	9	27	3,842	3.07	4.1	5.0	35	42	14	6.83	92	92
25-Feb-08	151.2	21	47	9	27	4,082	2.96	4.0	4.9	36	43	14	6.91	2,300	230
26-Feb-08	151.5	21	43	8	33	5,000	3.69	4.9	5.0	41	43	14	7.02	230	230
27-Feb-08	152.4	23	51	9	41	6,248	4.52	5.7	5.0	52	43	14	6.88	230	92
28-Feb-08	157.4	23	47	9	47	7,398	5.02	6.1	5.0	59	44	14	6.91	740	360
29-Feb-08	154.1	17	40	8	42	6,472	4.57	5.7	5.1	53	44	14	6.88	230	230
<b>Max:</b>	158														
<b>Min:</b>	142														
<b>Average:</b>	<b>149</b>	<b>20</b>	<b>42</b>	<b>9</b>	<b>34</b>	<b>5,082</b>	<b>4.01</b>	<b>5.1</b>		<b>44</b>		<b>13</b>	<b>6.95</b>		
<b>Geo.Mean:</b>														<b>662</b>	<b>529</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.