

**City of Winnipeg**  
**Water and Waste Department**  
**South End Water Pollution Control Centre Monitoring Data**  
**February, 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-Feb-07	45.5	7	12	4	31	1,411	3.55	4.5	4.5	36	34	14	6.92	49	49
2-Feb-07	45.7	<4	16	5	32	1,462	3.76	4.6	4.4	36	34	14	6.78	170	170
3-Feb-07	47.4	13	16	8	31	1,469	3.68	4.6	4.4	36	34	13	6.87	49	32
4-Feb-07	48.3	11	13	7	28	1,352	3.41	4.7	4.4	34	34	13	6.84	540	540
5-Feb-07	45.5	7	14	6	28	1,274	3.40	4.4	4.4	34	34	14	6.93	2,400	2,400
6-Feb-07	47.5	14	14	6	31	1,473	4.16	5.5	4.4	36	34	14	7.00	540	540
7-Feb-07	46.6	19	16	8	30	1,398	5.01	5.8	4.5	38	35	14	6.86	5,400	5,400
8-Feb-07	44.1	18	22	10	33	1,455	4.23	4.4	4.5	nr	35	14	6.85	920	920
9-Feb-07	45.8	10	22	12	31	1,420	4.25	5.2	4.5	34	35	15	6.84	9,200	9,200
10-Feb-07	47.8	22	40	27	30	1,434	4.69	5.8	4.5	33	35	13	6.88	1,600	1,600
11-Feb-07	48.2	41	41	30	30	1,446	4.18	5.5	4.5	36	35	14	6.61	920	920
12-Feb-07	45.5	21	27	17	30	1,365	3.71	4.6	4.6	33	35	14	6.78	1,600	1,600
13-Feb-07	44.0	15	23	14	31	1,364	4.11	5.1	4.6	36	35	14	6.92	54,000	54,000
14-Feb-07	45.1	14	15	9	29	1,308	3.65	4.3	4.6	36	35	14	6.90	1,600	1,600
15-Feb-07	43.8	11	16	8	30	1,314	4.69	5.1	4.5	32	35	13	6.94	5,400	5,400
16-Feb-07	45.5	12	21	10	29	1,320	4.45	5.0	4.5	33	35	15	6.77	920	920
17-Feb-07	47.0	18	26	18	30	1,410	4.32	4.8	4.5	32	35	14	6.71	240	240
18-Feb-07	47.1	17	31	21	27	1,272	3.88	4.9	4.5	33	35	14	6.75	350	350
19-Feb-07	44.0	8	13	8	29	1,276	4.32	4.8	4.5	32	35	15	6.74	5,400	5,400
20-Feb-07	41.6	11	17	8	31	1,290	4.47	5.3	4.6	34	35	15	6.89	33	33
21-Feb-07	40.2	7	13	5	35	1,407	4.82	5.3	4.5	36	35	15	6.89	240	240
22-Feb-07	45.1	9	12	7	35	1,579	4.88	5.3	4.6	35	35	14	6.70	240	240
23-Feb-07	45.9	10	14	8	33	1,515	5.06	5.6	4.6	35	35	14	nr	350	350
24-Feb-07	47.9	15	28	20	34	1,629	4.66	5.2	4.6	35	35	14	6.78	79	79
25-Feb-07	47.9	ns	ns	ns	ns	ns	ns	ns	4.6	ns	35	14	6.88	1,300	1,300
26-Feb-07	47.4	12	23	12	32	1,517	3.97	4.5	4.7	33	35	15	6.77	5,400	5,400
27-Feb-07	44.8	9	14	8	32	1,434	3.97	4.2	4.7	31	35	14	nr	3,500	3,500
28-Feb-07	46.2	10	17	10	30	1,386	4.34	4.8	4.8	34	35	15	6.52	920	920
<b>Max:</b>	48.3														
<b>Min:</b>	40.2														
<b>Average:</b>	<b>45.8</b>	<b>14</b>	<b>20</b>	<b>11</b>	<b>31</b>	<b>1,407</b>	<b>4.21</b>	<b>4.9</b>		<b>34</b>		<b>14</b>	<b>6.82</b>		
<b>Geo.Mean:</b>														<b>838</b>	<b>825</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.