

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data**

January 2011

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-Jan-11	135.4	25	33	6	25	3,317	4.12	4.3	4.3	34	32	14	6.95	14	4
2-Jan-11	134.8	14	19	5	26	3,451	4.09	4.6	4.3	36	32	14	6.92	230	93
3-Jan-11	144.8	11	24	8	27	3,924	4.72	5.3	4.4	39	32	14	6.93	43	21
4-Jan-11	149.8	15	33	9	25	3,715	4.32	5.1	4.4	35	33	14	6.88	93	23
5-Jan-11	153.7	15	24	8	27	4,150	4.47	5.4	4.4	36	33	15	6.74	930	930
6-Jan-11	150.2	14	25	7	26	3,875	3.66	4.2	4.4	37	33	15	6.74	43	23
7-Jan-11	146.3	18	23	5	27	3,906	3.25	4.0	4.4	38	33	14	6.79	150	150
8-Jan-11	149.4	ns	ns	ns	ns	ns	ns	ns	4.4	ns	33	ns	ns	ns	ns
9-Jan-11	141.2	ns	ns	ns	ns	ns	ns	ns	4.4	ns	33	ns	ns	ns	ns
10-Jan-11	151.4	13	33	6	25	3,785	2.44	3.1	4.4	34	34	11	6.95	380	230
11-Jan-11	152.1	15	35	7	25	3,833	2.46	3.2	4.4	36	34	13	6.88	43	43
12-Jan-11	152.0	13	24	8	33	5,077	2.50	3.1	4.3	39	34	14	6.75	150	43
13-Jan-11	151.2	19	35	9	37	5,594	3.03	3.6	4.3	50	35	15	6.88	93	93
14-Jan-11	151.1	15	39	5	33	5,047	2.37	3.0	4.2	45	35	15	6.84	230	230
15-Jan-11	142.1	20	33	8	30	4,277	2.18	2.9	4.2	42	36	14	7.03	930	230
16-Jan-11	145.9	14	31	6	27	3,896	1.83	2.4	4.1	38	36	13	7.02	150	75
17-Jan-11	149.5	12	29	12	27	4,096	1.73	2.3	4.1	38	36	12	6.97	230	93
18-Jan-11	150.8	11	29	8	29	4,343	2.56	3.2	4.0	39	36	13	7.14	430	430
19-Jan-11	152.7	14	36	8	29	4,474	1.93	2.5	4.0	39	36	14	6.83	23	9
20-Jan-11	151.2	10	30	7	29	4,355	1.69	2.3	3.9	39	37	13	6.77	230	230
21-Jan-11	152.2	12	25	5	25	3,866	1.50	2.2	3.8	36	37	13	6.96	23	9
22-Jan-11	148.3	15	27	6	26	3,885	1.46	2.1	3.7	34	37	14	7.08	75	75
23-Jan-11	149.1	11	26	7	25	3,698	1.50	2.0	3.7	33	37	13	7.03	230	230
24-Jan-11	142.8	11	22	7	26	3,770	1.47	2.0	3.6	37	37	12	7.01	930	230
25-Jan-11	148.6	15	22	8	30	4,473	1.91	2.5	3.5	41	37	13	7.11	930	150
26-Jan-11	149.9	11	20	6	31	4,587	1.70	2.2	3.4	40	37	14	6.79	93	93
27-Jan-11	150.3	15	26	7	31	4,689	1.21	1.7	3.3	41	38	15	6.93	43	23
28-Jan-11	141.7	22	24	7	38	5,370	1.33	1.8	3.2	43	38	14	6.88	43	43
29-Jan-11	143.4	11	28	5	28	4,030	1.79	2.4	3.1	39	38	14	6.93	23	23
30-Jan-11	140.0	19	32	8	27	3,793	2.61	3.4	3.1	38	38	13	6.85	93	93
31-Jan-11	143.5	22	27	8	27	3,917	2.56	3.3	3.1	36	38	13	6.72	23	23
Max:	154														
Min:	135														
Average:	147	15	28	7	28	4,179	2.50	3.1		38		14	6.91		
Geo. Mean:														117	69

Notes:

- (1) Effluent ammonia load based upon Raw Sewage flows and Final NH3-N concentration
- (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 calculation
- (4) * = 30 day rolling average
- (5)** Flow, highlighted in bold, in excess of 380 ML/D per clause 26 of Licence 2684RRR.
- (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 Nitrogen results are calculated from TKN and nitrate values.