

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

February 2012

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-12	144.4	13	54	10	26	3,798	2.91	3.8	2.9	37	37	14	6.65	120	75
2-Feb-12	145.4	12	55	9	25	3,679	2.74	3.5	3.0	37	37	15	6.67	1,500	1,500
3-Feb-12	143.9	26	33	12	27	3,885	2.57	3.6	3.0	39	37	14	6.87	930	210
4-Feb-12	141.7	30	46	nr	31	4,336	1.59	3.1	3.1	46	37	15	6.82	1,500	1,500
5-Feb-12	142.7	18	49	22	28	3,996	2.29	3.3	3.2	39	37	14	6.98	24,000	4,300
6-Feb-12	147.7	13	60	15	25	3,707	2.37	3.1	3.2	37	37	14	6.91	150	75
7-Feb-12	139.3	11	nr	nr	25	3,469	1.99	2.8	3.2	38	37	14	6.81	230	230
8-Feb-12	141.0	16	71	18	25	3,567	2.07	2.9	3.3	37	37	14	6.76	150	75
9-Feb-12	147.2	13	48	13	26	3,798	1.60	2.4	3.3	38	37	15	6.84	210	210
10-Feb-12	140.0	15	45	12	28	3,878	0.93	1.6	3.3	38	37	14	6.83	93	93
11-Feb-12	140.1	14	52	13	28	3,895	0.94	1.6	3.3	38	37	14	6.89	2,300	2,300
12-Feb-12	139.7	15	59	14	28	3,856	0.44	1.1	3.3	38	37	14	7.01	9,300	4,300
13-Feb-12	142.4	15	60	11	25	3,617	0.30	1.0	3.2	36	37	15	6.80	93	93
14-Feb-12	136.2	13	44	12	26	3,500	0.50	1.1	3.2	35	37	15	6.63	93	43
15-Feb-12	139.7	11	45	11	27	3,814	0.59	nr	3.1	36	37	14	6.58	230	230
16-Feb-12	140.0	14	52	15	28	3,976	0.70	1.6	3.0	38	37	14	6.79	2,300	2,300
17-Feb-12	139.0	14	43	10	27	3,809	0.75	1.3	3.0	37	37	14	6.76	930	430
18-Feb-12	142.0	16	50	11	29	4,118	0.95	1.5	2.9	37	37	14	6.76	430	150
19-Feb-12	132.0	16	53	10	28	3,749	0.73	1.3	2.8	37	37	14	6.92	230	93
20-Feb-12	151.0	12	48	11	27	4,107	0.85	1.5	2.7	36	37	14	6.77	930	930
21-Feb-12	149.0	17	34	9	25	3,755	0.82	1.5	2.6	35	37	14	6.66	230	230
22-Feb-12	150.0	16	33	10	37	5,610	1.06	1.9	2.5	46	38	14	6.72	150	150
23-Feb-12	145.0	17	41	11	34	4,916	0.80	1.7	2.5	42	38	14	6.66	230	93
24-Feb-12	148.4	17	41	10	34	5,001	0.76	1.5	2.4	41	38	14	6.72	150	150
25-Feb-12	137.2	25	34	10	30	4,157	0.81	1.7	2.3	37	38	14	6.80	930	930
26-Feb-12	127.7	17	38	13	30	3,869	0.43	1.2	2.2	38	38	14	6.80	2300	2300
27-Feb-12	139.3	21	37	11	31	4,360	0.56	1.3	2.2	39	38	14	6.89	230	93
28-Feb-12	148.1	22	33	11	40	5,850	0.86	1.8	2.1	48	38	14	6.86	2300	2300
29-Feb-12	170.9	30	41	12	39	6,631	0.97	1.9	2.0	48	39	14	6.84	230	230
Max:	170.9														
Min:	127.7														
Average:	143.1	17	46	12	29	4,162	1.20	2.0		39		14	6.79		
Geo.Mean:														497	338

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 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.