

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
December 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-Dec-07	151.1	9	35	6	33	4,986	4.31	4.7	4.0	40	34	15	6.90	140	36
2-Dec-07	148.6	13	42	7	34	5,052	4.47	5.3	4.0	43	34	15	7.03	920	23
3-Dec-07	152.9	10	62	6	32	4,893	4.31	5.3	4.0	47	35	12	6.84	2,300	2,300
4-Dec-07	152.9	8	39	7	33	5,046	4.05	4.0	4.1	35	35	11	6.95	23	23
5-Dec-07	154.0	12	43	6	32	4,928	3.95	4.8	4.1	43	35	16	6.87	230	92
6-Dec-07	154.3	11	36	6	34	5,246	4.13	4.3	4.1	39	36	16	6.92	360	43
7-Dec-07	154.2	8	39	8	33	5,089	4.06	4.7	4.1	43	36	15	6.83	920	92
8-Dec-07	149.8	10	39	9	33	4,943	4.44	5.1	4.2	43	36	15	7.09	9,200	3,600
9-Dec-07	146.9	11	47	7	33	4,848	4.50	6.0	4.2	47	36	16	6.98	230	230
10-Dec-07	153.8	10	61	6	33	5,075	4.49	4.2	4.3	39	37	15	7.00	3,600	3,600
11-Dec-07	153.1	10	56	6	32	4,899	4.42	5.3	4.3	45	37	16	6.95	92	36
12-Dec-07	154.1	10	47	5	31	4,777	4.36	4.4	4.3	40	37	16	7.01	300	36
13-Dec-07	153.2	10	73	5	32	4,902	3.92	5.2	4.3	44	37	16	7.05	36	23
14-Dec-07	154.2	7	37	6	34	5,243	3.96	3.4	4.3	32	37	15	6.78	23	<3
15-Dec-07	150.8	7	26	6	34	5,127	4.03	3.8	4.3	37	37	15	6.82	15	7
16-Dec-07	147.6	8	21	6	33	4,871	3.89	4.8	4.3	39	38	16	6.91	9,200	1,500
17-Dec-07	150.4	9	30	5	32	4,813	3.78	4.8	4.3	43	38	16	6.84	23	23
18-Dec-07	152.0	8	23	5	34	5,168	3.95	3.9	4.4	35	38	16	6.84	92	92
19-Dec-07	156.9	8	26	5	34	5,335	3.95	4.7	4.4	40	38	15	6.93	36	36
20-Dec-07	153.4	9	31	5	34	5,216	4.22	4.4	4.4	37	38	16	7.00	230	230
21-Dec-07	157.4	6	25	5	34	5,352	4.20	3.3	4.4	33	38	16	6.77	30	30
22-Dec-07	152.2	9	30	6	35	5,327	4.62	5.0	4.4	43	39	16	6.91	23	23
23-Dec-07	156.4	10	37	7	34	5,318	4.80	4.8	4.5	40	39	16	7.07	43,000	9,200
24-Dec-07	164.7	9	42	6	33	5,435	3.84	3.9	4.5	34	39	15	6.92	920	920
25-Dec-07	128.1	7	37	5	33	4,227	3.86	4.2	4.5	43	39	15	6.90	92	36
26-Dec-07	137.2	11	41	4	37	5,076	4.65	3.1	4.4	34	39	15	6.97	92	23
27-Dec-07	147.5	9	50	5	37	5,458	4.72	5.2	4.5	40	39	15	6.91	230	4
28-Dec-07	147.5	8	31	6	35	5,163	4.48	5.7	4.6	40	40	15	6.96	230	36
29-Dec-07	144.5	9	31	6	36	5,202	4.46	4.1	4.6	29	40	15	7.05	230	230
30-Dec-07	141.5	11	34	5	36	5,094	4.37	5.1	4.6	37	39	15	7.06	15,000	150
31-Dec-07	150.4	12	47	6	34	5,114	4.27	4.9	4.6	21	39	16	6.91	360	92
Max:	165														
Min:	128														
Average:	151	9	39	6	34	5,072	4.24	4.6		39		15	6.93		
Geo.Mean:														273	98

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) The results for Total Nitrogen and Phosphorus are lower than normal due to technical difficulties with our analysis. Total Phosphorus and Total Nitrogen results are corrected based on the recovery of a quality control standard