

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
December 2009

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-09	150.3	15	21	5	39	5,877	5.33	6.0	4.8	45	37	17	6.73	330	330
2-Dec-09	151.7	10	21	5	33	5,067	4.63	5.2	4.8	39	37	16	6.81	790	490
3-Dec-09	158.4	10	22	4	30	4,768	5.63	nr	4.8	32	37	15	6.93	170	170
4-Dec-09	154.3	13	18	5	29	4,428	4.75	5.3	4.9	31	37	15	6.64	94	94
5-Dec-09	150.2	7	18	5	27	4,085	4.43	4.7	4.9	34	37	15	6.86	490	330
6-Dec-09	142.1	8	16	4	27	3,808	4.02	4.6	4.9	32	37	15	6.87	490	39
7-Dec-09	147.4	9	22	4	27	3,921	3.97	4.6	4.9	31	37	16	6.62	79	33
8-Dec-09	150.9	8	16	5	30	4,467	4.54	5.1	4.9	33	37	14	6.63	330	110
9-Dec-09	153.5	8	26	5	33	5,035	5.42	5.9	4.9	36	36	16	6.64	540	220
10-Dec-09	144.6	6	32	6	31	4,439	4.98	5.5	4.9	35	36	13	6.76	700	220
11-Dec-09	146.6	13	25	6	28	4,105	4.70	5.0	4.9	31	36	14	6.68	110	33
12-Dec-09	145.4	10	27	6	30	4,347	4.24	4.8	4.9	nr	36	13	6.83	1,300	1,300
13-Dec-09	140.5	10	39	5	27	3,850	4.15	4.5	4.9	nr	36	13	6.84	1,300	31
14-Dec-09	146.9	13	37	8	25	3,717	4.01	4.9	4.9	30	36	16	6.72	170	21
15-Dec-09	150.1	10	25	6	28	4,173	4.34	4.8	4.9	29	35	15	6.72	230	130
16-Dec-09	156.5	17	26	7	34	5,274	5.16	5.7	5.0	35	35	16	6.64	330	170
17-Dec-09	151.3	20	71	8	32	4,811	5.18	5.9	5.0	38	35	16	6.60	350	350
18-Dec-09	148.9	14	38	7	30	4,452	4.22	4.8	5.0	32	35	15	6.63	920	170
19-Dec-09	147.5	11	21	7	29	4,292	3.96	4.6	5.0	31	35	15	6.85	2,200	700
20-Dec-09	140.9	10	23	6	29	4,044	4.08	4.6	5.0	32	34	15	6.80	230	34
21-Dec-09	147.6	14	25	7	28	4,133	4.32	5.0	5.0	30	34	16	6.65	130	130
22-Dec-09	151.8	11	nr	nr	31	4,691	4.82	5.3	5.0	nr	34	16	6.66	130	22
23-Dec-09	153.4	8	23	7	30	4,648	4.92	5.2	5.0	34	34	16	6.47	230	130
24-Dec-09	148.2	16	21	7	29	4,342	4.00	4.5	5.0	32	34	16	6.48	350	110
25-Dec-09	149.1	8	16	6	27	4,085	3.98	4.6	5.0	32	34	nr	6.71	110	11
26-Dec-09	130.1	15	21	5	31	4,033	4.53	5.1	5.0	35	34	nr	6.80	230	22
27-Dec-09	136.0	12	nr	nr	30	4,134	4.52	5.3	5.1	33	34	16	6.92	3,300	790
28-Dec-09	143.5	11	21	7	31	4,506	4.76	5.2	5.1	35	34	19	6.98	330	330
29-Dec-09	147.9	10	17	7	32	4,733	5.21	5.6	5.1	34	34	ns	ns	ns	ns
30-Dec-09	148.4	11	14	6	28	4,170	5.08	5.7	5.1	31	33	ns	ns	ns	ns
31-Dec-09	149.0	5	21	6	27	3,978	4.28	4.8	5.1	30	33	17	6.89	330	230
Max:	158														
Min:	130														
Average:	148	11	25	6	30	4,400	4.59	5.1		33		15	6.74		
Geo.Mean:														347	122

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.