

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
November 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-Nov-09	171.9	6	12	3	22	3,816	3.41	3.6	4.2	30	29	15	6.97	230	12
2-Nov-09	171.7	13	25	5	22	3,743	3.69	4.2	4.2	26	29	16	6.78	79	13
3-Nov-09	161.2	12	21	4	24	3,901	3.72	5.1	4.2	36	29	16	6.73	110	6
4-Nov-09	160.0	13	26	5	25	4,016	3.88	4.5	4.2	32	29	16	6.75	170	17
5-Nov-09	163.8	<4	25	3	25	4,062	3.71	4.1	4.2	32	29	16	6.80	79	79
6-Nov-09	163.4	14	26	6	27	4,395	4.10	4.7	4.2	37	29	17	6.74	(170)	(79)
7-Nov-09	157.4	5	17	4	29	4,502	4.34	4.8	4.3	37	30	18	6.89	70	11
8-Nov-09	155.7	7	19	4	28	4,406	4.66	5.2	4.3	37	30	16	6.85	330	48
9-Nov-09	159.8	22	27	6	26	4,187	4.61	5.5	4.4	48	31	16	6.73	230	22
10-Nov-09	156.8	9	18	4	25	3,983	4.47	4.9	4.4	nr	31	17	6.59	230	33
11-Nov-09	148.8	8	16	3	27	4,077	4.34	4.6	4.4	34	31	16	7.00	130	79
12-Nov-09	157.0	5	23	4	28	4,349	4.17	4.8	4.5	37	32	17	6.63	230	79
13-Nov-09	160.3	6	14	3	26	4,184	3.96	4.7	4.5	39	32	16	6.70	110	110
14-Nov-09	156.1	4	14	3	29	4,464	5.53	nr	4.5	39	33	16	7.01	79	33
15-Nov-09	146.7	9	17	4	29	4,313	4.11	4.6	4.5	41	33	17	6.94	110	49
16-Nov-09	147.3	8	23	4	26	3,889	4.03	4.7	4.5	37	33	17	6.63	49	22
17-Nov-09	148.4	9	21	4	27	4,005	3.89	4.6	4.5	37	33	16	6.82	220	17
18-Nov-09	149.3	9	20	3	29	4,255	4.22	4.6	4.5	38	34	17	6.70	170	26
19-Nov-09	152.5	<4	23	4	32	4,911	4.29	4.8	4.5	37	34	17	6.78	230	79
20-Nov-09	153.7	14	30	5	35	5,410	4.42	5.1	4.5	37	34	18	6.71	130	49
21-Nov-09	148.7	6	13	5	34	5,026	4.20	4.8	4.5	36	34	18	6.91	96	14
22-Nov-09	147.4	8	11	4	32	4,732	4.09	4.7	4.6	39	35	18	6.92	170	70
23-Nov-09	151.0	9	12	4	29	4,394	3.80	4.5	4.5	32	35	17	6.63	130	11
24-Nov-09	154.5	7	10	4	34	5,284	4.03	4.7	4.6	38	35	17	6.73	70	13
25-Nov-09	167.8	8	12	5	35	5,923	4.28	4.7	4.6	nr	35	16	6.71	79	9
26-Nov-09	162.0	13	22	4	32	5,135	3.87	4.6	4.5	35	35	17	6.94	350	170
27-Nov-09	152.8	8	11	4	32	4,949	4.03	4.6	4.5	nr	35	17	6.75	240	21
28-Nov-09	145.4	7	13	4	32	4,610	4.34	4.6	4.5	33	35	16	6.91	<2	<2
29-Nov-09	147.6	5	15	4	32	4,648	4.37	4.9	4.6	35	36	16	6.90	220	49
30-Nov-09	151.5	15	31	6	37	5,544	5.02	5.8	4.7	40	36	16	6.60	5,400	220
Max:	172														
Min:	145														
Average:	156	9	19	4	29	4,504	4.19	4.7		36		16	6.79		
Geo.Mean:														135	28

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.