

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
October 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-Oct-09	210.2	28	45	8	17	3,489	3.70	4.8	3.7	30	22	19	6.50	1,100	920
2-Oct-09	169.9	nr	14	3	17	2,803	3.63	4.2	3.7	31	22	18	6.55	790	490
3-Oct-09	161.6	10	14	4	20	3,297	4.09	4.4	3.7	33	23	19	6.81	41	34
4-Oct-09	161.7	11	12	3	18	2,878	3.88	4.4	3.7	32	23	18	6.80	330	170
5-Oct-09	164.9	9	14	4	15	2,539	3.67	4.2	3.7	26	23	19	6.52	490	490
6-Oct-09	168.8	8	11	3	17	2,836	3.93	4.3	3.8	28	23	19	6.49	350	210
7-Oct-09	196.1	17	22	6	19	3,667	3.88	4.6	3.8	31	24	19	6.51	33	23
8-Oct-09	168.9	8	16	4	17	2,821	3.36	3.9	3.8	29	24	18	6.61	490	230
9-Oct-09	157.6	7	13	4	18	2,853	3.82	4.1	3.8	26	24	18	6.50	230	93
10-Oct-09	198.9	9	24	7	16	3,163	3.23	3.9	3.9	25	25	ns	ns	ns	ns
11-Oct-09	145.9	9	12	4	14	2,013	2.66	3.0	3.9	21	25	19	6.95	430	15
12-Oct-09	155.9	13	17	5	16	2,448	3.34	3.9	4.0	27	26	na	6.75	43	4
13-Oct-09	154.2	15	20	4	17	2,652	3.51	4.1	4.0	25	26	17	6.49	49	49
14-Oct-09	163.3	13	14	4	22	3,511	4.22	4.7	4.1	29	26	17	6.34	130	23
15-Oct-09	192.3	10	30	3	20	3,923	3.33	4.0	4.1	27	26	17	6.61	930	430
16-Oct-09	159.5	12	14	4	25	3,908	4.04	nr	4.1	nr	26	19	6.49	33	26
17-Oct-09	153.5	9	20	5	26	3,960	4.11	4.4	4.1	34	27	19	6.83	170	13
18-Oct-09	153.7	6	16	3	25	3,873	4.06	4.4	4.1	31	27	18	6.81	33	17
19-Oct-09	159.9	17	28	6	25	3,934	3.93	4.3	4.1	nr	27	17	6.66	130	23
20-Oct-09	154.8	20	25	6	25	3,885	4.26	5.0	4.2	33	27	18	6.50	330	23
21-Oct-09	157.2	12	25	5	25	3,977	4.16	4.7	4.2	31	28	19	6.61	nr	33
22-Oct-09	155.8	7	27	5	24	3,770	3.86	4.3	4.2	27	28	17	6.60	23	13
23-Oct-09	165.7	12	24	4	23	3,861	3.97	4.4	4.2	27	28	19	6.56	790	170
24-Oct-09	151.8	6	13	4	28	4,175	4.55	5.0	4.3	33	28	19	6.77	110	33
25-Oct-09	167.2	10	13	4	25	4,180	3.62	4.1	4.3	31	28	18	6.75	170	79
26-Oct-09	151.3	17	27	5	25	3,783	3.99	4.6	4.3	35	29	17	6.76	70	22
27-Oct-09	149.9	5	24	4	26	3,927	4.56	5.0	4.3	33	29	18	6.66	490	17
28-Oct-09	161.2	9	16	3	26	4,256	4.44	4.9	4.3	34	29	18	6.80	nr	nr
29-Oct-09	240.3	70	>71	22	21	5,118	3.37	5.0	4.4	32	30	17	6.67	240	240
30-Oct-09	228.5	6	12	4	14	3,085	1.71	2.0	4.3	17	29	13	6.74	1,100	170
31-Oct-09	163.3	6	11	2	20	3,282	2.52	2.8	4.2	24	29	16	6.99	110	46
Max:	240														
Min:	146														
Average:	169	13	21	5	21	3,480	3.72	4.2		29		18	6.65		
Geo.Mean:														183	58

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.