

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
May 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-May-09	225.8	23	41	14	13	2,958	2.09	3.2	2.7	22	20	12	7.06	2,300	790
2-May-09	205.0	24	36	13	13	2,747	2.17	3.1	2.7	20	20	13	6.95	1,400	1,400
3-May-09	203.2	30	37	14	13	2,540	2.12	3.1	2.7	23	20	13	6.82	220	140
4-May-09	203.2	33	52	14	13	2,642	2.31	3.5	2.8	24	20	13	6.98	27	27
5-May-09	203.4	28	56	13	14	2,807	2.26	3.4	2.8	21	20	13	6.86	130	79
6-May-09	201.2	36	45	15	15	2,917	2.36	3.5	2.8	25	20	13	6.80	79	49
7-May-09	231.7	40	40	17	13	3,082	2.13	3.5	2.8	23	20	14	6.94	33	33
8-May-09	212.6	30	41	14	15	3,104	2.31	3.9	2.9	27	20	13	6.86	130	79
9-May-09	182.4	36	43	12	15	2,754	2.62	3.7	2.9	27	21	13	6.97	230	4
10-May-09	178.3	33	32	12	15	2,692	2.66	3.6	3.0	29	21	12	6.97	49	17
11-May-09	188.6	26	38	12	15	2,867	2.62	3.9	3.1	24	22	12	7.07	33	17
12-May-09	189.4	38	43	13	15	2,860	2.65	3.6	3.1	21	22	15	6.92	23	8
13-May-09	672.0	ns	ns	ns	ns	ns	ns	ns	3.2	ns	22	14	6.98	(160000)	(160000)
14-May-09	587.4	41	39	21	5	2,919	0.99	1.8	3.2	19	22	12	7.37	(>160000)	(>160000)
15-May-09	445.8	34	31	20	6	2,456	1.05	1.9	3.2	16	22	10	7.49	(>160000)	(>160000)
16-May-09	326.3	26	18	9	7	2,154	1.25	1.9	3.2	16	22	11	7.36	3,300	3,300
17-May-09	289.7	17	17	9	8	2,277	1.52	2.1	3.2	20	23	11	7.17	330	230
18-May-09	289.7	18	21	8	8	2,234	1.63	2.3	3.1	19	23	12	7.32	220	94
19-May-09	264.1	15	36	8	9	2,472	1.84	2.5	3.1	19	23	13	7.18	490	79
20-May-09	267.1	19	40	7	11	2,911	1.62	2.6	3.1	19	22	16	7.09	130	79
21-May-09	241.4	22	47	10	12	2,897	1.75	2.7	3.1	19	22	12	7.14	33	23
22-May-09	262.3	16	51	10	12	3,174	1.77	2.7	3.1	17	22	14	7.11	33	17
23-May-09	228.0	12	35	7	12	2,804	1.66	2.3	3.1	20	22	14	6.98	33	33
24-May-09	216.2	13	26	6	14	3,005	2.06	2.7	3.0	21	22	13	6.98	17	7
25-May-09	434.4	37	49	15	8	3,354	1.30	2.3	3.0	16	22	14	7.02	(>160000)	(>160000)
26-May-09	290.4	11	26	6	9	2,602	1.44	2.1	3.0	16	21	12	7.15	1,100	1,100
27-May-09	247.9	13	34	6	12	3,000	1.82	2.5	2.9	19	21	13	7.06	13	13
28-May-09	235.5	10	24	6	16	3,650	1.89	2.7	2.9	20	21	14	7.04	8	2
29-May-09	236.3	10	18	7	17	4,017	2.08	2.8	2.9	19	21	14	7.10	33	33
30-May-09	212.0	7	14	6	15	3,201	2.03	2.5	2.8	20	21	14	7.21	1,100	1,100
31-May-09	220.7	11	18	5	14	3,178	1.88	2.4	2.8	17	21	14	6.91	79	22
Max:	672														
Min:	178														
Average:	271	24	35	11	12	2,876	1.93	2.8		21		13	7.06		
Geo.Mean:														112	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 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.