

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
November 2010**

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-10	79.6	14	64	6	10	761	2.12	2.6	3.4	19	24	15	6.78	38	23
2-Nov-10	75.3	13	65	6	10	749	2.04	2.7	3.4	20	24	16	6.68	23	23
3-Nov-10	72.9	nr	67	8	10	704	2.22	2.9	3.4	19	24	17	6.77	21	11
4-Nov-10	70.9	13	71	8	11	745	2.58	3.2	3.4	20	24	17	6.70	9	9
5-Nov-10	70.0	13	69	4	11	756	2.40	2.9	3.4	19	24	16	6.77	43	43
6-Nov-10	67.7	13	65	4	10	675	2.18	2.8	3.4	17	23	16	6.66	7	4
7-Nov-10	70.9	14	68	7	11	773	2.24	2.8	3.3	21	23	16	6.55	93	93
8-Nov-10	65.4	12	59	6	11	746	2.42	3.0	3.3	18	23	16	6.61	93	23
9-Nov-10	63.6	ns	ns	ns	ns	ns	ns	ns	3.3	ns	23	17	6.55	38	23
10-Nov-10	61.9	5	36	3	14	848	3.10	3.3	3.3	23	23	17	6.59	15	7
11-Nov-10	62.3	6	64	5	12	773	2.88	3.3	3.3	23	23	17	6.67	43	15
12-Nov-10	59.1	8	62	3	13	745	3.16	3.5	3.3	23	23	16	6.59	43	43
13-Nov-10	59.0	<4	63	4	13	779	3.11	3.4	3.3	24	23	16	6.54	<3	<3
14-Nov-10	60.4	8	71	5	14	834	2.96	3.3	3.2	23	22	16	6.65	4	4
15-Nov-10	58.3	8	72	4	14	834	3.25	3.5	3.2	23	22	17	6.53	4	4
16-Nov-10	56.5	<4	47	3	15	870	3.74	4.0	3.2	25	22	17	6.61	15	15
17-Nov-10	56.4	5	61	3	16	885	3.36	3.7	3.2	26	22	16	6.59	150	28
18-Nov-10	55.5	5	>74	5	17	966	3.55	3.7	3.2	26	22	16	6.66	3	<3
19-Nov-10	54.2	5	60	3	17	921	3.35	3.6	3.2	26	22	15	6.62	7	4
20-Nov-10	55.1	6	47	3	17	926	3.54	3.9	3.1	27	22	15	6.59	23	9
21-Nov-10	56.1	8	39	4	18	1,015	3.58	3.8	3.1	26	22	16	6.57	4	<3
22-Nov-10	53.6	6	37	5	18	976	3.65	3.8	3.1	26	21	16	6.51	23	9
23-Nov-10	52.4	5	37	5	19	995	3.97	4.3	3.1	28	21	15	6.45	23	23
24-Nov-10	52.1	7	35	5	20	1,036	3.90	4.2	3.1	28	22	15	6.63	43	43
25-Nov-10	52.2	5	44	5	20	1,022	3.92	4.2	3.2	29	22	16	6.57	23	23
26-Nov-10	51.7	6	51	3	21	1,075	3.76	4.1	3.3	30	23	15	6.52	23	23
27-Nov-10	52.0	6	32	5	21	1,092	3.58	3.9	3.4	29	23	16	6.58	4	4
28-Nov-10	53.3	8	46	5	21	1,125	3.51	3.8	3.4	29	24	15	6.63	4	4
29-Nov-10	51.8	6	26	5	21	1,087	5.20	5.5	3.5	29	24	17	6.48	45	15
30-Nov-10	49.9	5	27	5	22	1,097	4.94	5.0	3.6	29	24	16	6.38	7	4
Max:	79.6														
Min:	49.9														
Average:	60.0	8	54	5	15	890	3.25	3.6		24		16	6.60		
Geo.Mean:														16	11

Notes:

- (1) effluent ammonia load based upon Raw Sewage flows and Final NH3-N concentrations (5)** Flow, highlighted in bold, in excess of 98.6 ML/D per clause 26 of Licence 2716R.
- (2) nr - not recorded or no result; na - not analyzed; ns - no sample (6) Bracketed Coliform results not used in the Geometric Mean calculation.
- (3) Where value is expressed as less than (<), the value is halved and used in the calculation (7) Raw wastewater flows in excess of 100 ML/D will by-pass the secondary process.
- (4) * = 30 day rolling average (8) Total Nitrogen results are calculated from TKN and nitrate values.