

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
November 2008**

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-08	51.6	10	34	10	20	1,026	4.74	5.2	4.6	28	23	17	6.62	79	22
2-Nov-08	53.7	14	46	12	13	672	3.09	4.7	4.6	28	23	18	6.58	280	79
3-Nov-08	52.0	4	33	8	17	858	3.72	4.3	4.5	21	22	16	6.54	13,000	3,300
4-Nov-08	51.2	19	53	15	20	1,045	4.78	5.9	4.5	28	22	18	6.56	(92000)	(92000)
5-Nov-08	53.0	19	50	14	22	1,182	4.93	5.4	4.5	27	22	18	6.53	(24000)	(24000)
6-Nov-08	77.2	19	56	16	18	1,351	3.92	4.3	4.6	20	22	17	6.57	(92000)	(92000)
7-Nov-08	86.9	10	nr	7	11	939	2.11	2.4	4.5	15	22	14	6.61	17	4
8-Nov-08	72.3	8	29	5	13	947	2.68	3.0	4.4	20	22	15	6.67	140	49
9-Nov-08	67.0	9	36	6	14	924	3.22	3.6	4.4	21	22	15	6.69	7	4
10-Nov-08	67.4	4	32	6	14	931	3.41	3.9	4.3	23	22	16	6.68	49	49
11-Nov-08	61.8	8	34	7	16	958	3.49	4.0	4.4	25	22	15	6.67	33	11
12-Nov-08	60.6	8	30	7	15	902	3.52	4.3	4.4	23	22	17	6.56	49	7
13-Nov-08	82.7	9	51	6	13	1,100	2.77	3.5	4.4	18	23	16	6.78	(7,900)	(1,400)
14-Nov-08	70.6	4	21	4	11	798	2.89	3.6	4.4	17	22	15	6.70	nr	nr
15-Nov-08	67.3	11	37	9	12	814	3.30	4.0	4.4	18	22	16	6.62	46	23
16-Nov-08	67.5	13	34	9	12	824	3.42	4.2	4.4	18	22	16	6.75	26	4
17-Nov-08	62.7	10	37	7	12	771	3.70	4.5	4.4	18	22	16	6.66	430	21
18-Nov-08	61.9	6	31	6	14	861	3.86	4.7	4.4	19	22	15	6.53	2,300	490
19-Nov-08	59.3	7	36	7	14	836	4.20	4.9	4.4	22	22	16	6.54	280	170
20-Nov-08	58.6	8	36	7	15	867	4.40	5.1	4.4	21	22	15	6.53	1,100	140
21-Nov-08	58.4	8	39	8	16	952	4.00	4.9	4.4	23	22	15	6.62	110	21
22-Nov-08	59.1	10	36	7	15	909	3.54	4.4	4.4	20	22	16	6.49	120	81
23-Nov-08	59.5	10	50	9	16	922	3.56	4.4	4.4	21	22	16	6.47	210	94
24-Nov-08	55.8	7	49	6	15	853	3.78	4.4	4.3	22	22	15	6.47	220	27
25-Nov-08	54.6	7	43	5	17	907	4.32	4.9	4.4	23	22	16	6.48	355	355
26-Nov-08	52.5	8	55	5	17	907	4.25	4.8	4.4	23	22	16	6.97	17	4
27-Nov-08	53.5	7	55	5	18	958	4.42	5.0	4.4	25	22	16	6.55	70	33
28-Nov-08	53.7	9	45	7	19	1,036	4.95	5.5	4.4	26	22	16	6.52	94	63
29-Nov-08	54.0	10	42	8	19	1,020	4.23	5.0	4.5	27	22	15	7.62	110	70
30-Nov-08	54.4	8	40	6	19	1,006	4.10	4.9	4.5	25	22	16	6.63	330	240
Max:	86.9														
Min:	51.2														
Average:	61.9	9	40	8	16	936	3.78	4.5		22		15.8	6.64		
Geo.Mean:														133	43

- 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 98.6 ML/D per clause 26 of Licence 2716.
 - (6) Bracketed Coliform results not used in the Geometric Mean calculation.
 - (7) Raw wastewater flows in excess of 100 ML/D will by-pass the secondary process.