

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
January 2011**

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-Jan-11	44.2	10	21	5	29	1,292	3.62	4.0	4.1	36	32	14	6.71	4	4
2-Jan-11	45.1	10	21	4	31	1,404	3.82	4.3	4.1	38	32	14	6.61	<3	<3
3-Jan-11	48.0	10	20	6	31	1,493	3.72	4.3	4.1	39	32	14	6.62	<3	<3
4-Jan-11	47.1	10	19	8	29	1,385	3.51	4.1	4.1	38	33	15	6.72	15	9
5-Jan-11	46.9	6	14	4	30	1,397	3.70	3.9	4.1	36	33	14	6.60	<3	<3
6-Jan-11	46.9	11	30	10	30	1,406	4.05	4.2	4.1	39	33	ns	ns	ns	ns
7-Jan-11	46.9	8	18	4	30	1,403	3.44	4.0	4.1	38	33	14	6.54	38	7
8-Jan-11	46.8	7	20	5	32	1,473	3.55	4.0	4.1	39	33	15	6.60	9	9
9-Jan-11	48.0	7	20	6	30	1,440	3.54	4.1	4.1	39	34	15	6.64	43	15
10-Jan-11	50.3	9	<10	8	29	1,479	3.98	4.6	4.1	38	34	15	6.59	43	23
11-Jan-11	47.4	12	18	7	30	1,421	4.07	4.6	4.1	39	34	15	6.59	9	9
12-Jan-11	46.3	9	19	7	31	1,449	4.81	5.2	4.1	39	34	15	6.58	93	93
13-Jan-11	45.9	10	17	7	32	1,460	4.81	5.3	4.2	39	34	15	6.66	43	43
14-Jan-11	44.9	8	18	4	32	1,435	3.80	4.2	4.2	40	36	15	6.66	93	93
15-Jan-11	46.7	14	25	8	32	1,484	4.02	4.6	4.2	41	37	ns	ns	ns	ns
16-Jan-11	48.0	13	18	9	32	1,518	3.73	4.1	4.2	39	37	14	6.59	4	4
17-Jan-11	46.6	9	16	7	30	1,393	3.72	4.3	4.2	38	37	14	6.58	43	43
18-Jan-11	45.2	8	14	6	33	1,501	4.07	4.5	4.2	41	38	14	6.58	9	9
19-Jan-11	45.1	10	13	7	33	1,464	4.70	5.2	4.2	41	38	15	6.63	150	75
20-Jan-11	45.6	12	17	6	32	1,472	4.90	5.5	4.3	40	38	14	6.70	9	4
21-Jan-11	45.9	8	16	4	33	1,528	4.28	4.6	4.3	41	38	15	6.64	93	43
22-Jan-11	46.9	11	15	6	33	1,544	4.07	4.5	4.3	42	38	14	6.68	4	4
23-Jan-11	46.8	9	20	8	33	1,550	3.91	4.4	4.4	42	39	15	6.58	15	15
24-Jan-11	45.1	10	14	7	31	1,417	4.05	4.5	4.4	39	39	15	6.64	15	15
25-Jan-11	44.5	12	16	7	32	1,414	4.60	5.2	4.4	41	39	15	6.55	93	43
26-Jan-11	44.9	11	15	9	33	1,499	4.56	4.8	4.4	39	39	ns	ns	ns	ns
27-Jan-11	45.9	12	23	9	35	1,582	5.35	6.0	4.5	43	39	15	6.61	230	230
28-Jan-11	45.9	12	18	8	33	1,491	4.69	5.4	4.6	41	39	15	6.62	43	43
29-Jan-11	48.4	7	14	5	33	1,581	3.96	4.8	4.6	42	40	14	6.68	23	23
30-Jan-11	49.0	11	25	7	34	1,671	3.96	4.5	4.6	41	40	15	6.55	23	23
31-Jan-11	47.3	8	13	6	32	1,517	3.86	4.4	4.6	38	40	16	6.68	23	23
Max:	50.3														
Min:	44.2														
Average:	46.5	10	18	7	32	1,470	4.09	4.6		40		15	6.62	19	15
Geo.Mean:															

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.