

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
July, 2005

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-Jul-05	637.7	50	40	29	4	2,550	0.66	1.0	*	20	*	15.5	6.98	1,500,000	1,500,000
2-Jul-05	533.2	52	33	27	4	2,130	0.68	0.8	*	15	*	16.0	7.80	2,300,000	2,300,000
3-Jul-05	665.7	84	50	46	3	2,000	0.63	1.2	1.9	12	19	17.5	7.21	93,000	93,000
4-Jul-05	568.9	58	52	51	5	2,850	0.97	1.8	1.8	15	19	17.0	7.79	9,300,000	9,300,000
5-Jul-05	424.5	62	61	>37	7	2,970	1.17	2.4	1.8	19	19	17.0	7.56	nr	nr
6-Jul-05	379.9	82	67	58	13	4,940	1.56	3.3	1.9	24	19	17.0	7.81	750,000	750,000
7-Jul-05	379.4	120	65	49	12	4,550	1.60	3.1	1.9	23	19	19.0	7.95	15,000,000	4,300,000
8-Jul-05	691.9	58	50	46	7	4,840	0.86	1.4	1.9	11	19	19.0	7.69	2,300,000	2,300,000
9-Jul-05	430.1	43	52	51	9	3,870	1.14	1.9	1.9	24	19	19.0	7.76	930,000	930,000
10-Jul-05	351.8	69	46	37	7	2,460	0.98	1.9	1.9	14	19	19.0	7.78	2,300,000	2,300,000
11-Jul-05	667.5	50	35	26	3	2,000	0.84	1.5	1.9	12	19	20.5	7.44	750,000	750,000
12-Jul-05	537.1	88	51	>36	8	4,300	1.10	2.4	1.9	19	19	19.5	7.80	nr	nr
13-Jul-05	396.1	57	62	>36	11	4,360	1.58	2.9	1.9	22	19	20.0	7.79	4,300,000	4,300,000
14-Jul-05	368.5	50	84	>32	4	1,470	1.89	2.4	2.0	22	19	20.0	7.88	2,100,000	1,500,000
15-Jul-05	289.1	40	94	>75	14	4,050	2.08	2.6	2.0	21	19	20.0	7.73	4,300,000	4,300,000
16-Jul-05	287.8	64	63	62	10	2,880	1.49	2.1	2.0	17	20	20.0	7.70	9,300,000	9,300,000
17-Jul-05	593.0	56	27	30	3	1,780	0.63	1.0	2.0	11	19	19.5	7.38	930,000	430,000
18-Jul-05	598.6	42	40	34	7	4,190	1.08	1.6	2.0	14	19	18.5	7.83	4,300,000	4,300,000
19-Jul-05	407.0	48	44	33	8	3,260	2.15	3.1	2.0	21	19	18.0	7.73	430,000	430,000
20-Jul-05	331.0	21	33	>18	12	3,970	1.30	1.7	2.0	16	19	19.0	7.23	230,000	230,000
21-Jul-05	292.0	10	29	17	12	3,500	1.29	2.0	2.0	18	19	19.0	7.26	nr	2,300,000
22-Jul-05	282.0	15	29	11	14	3,950	1.66	2.2	2.0	19	19	19.0	7.11	230,000	230,000
23-Jul-05	268.5	9	30	8	13	3,490	1.71	2.0	2.0	17	18	19.0	7.14	23,000	9,300
24-Jul-05	242.2	8	33	6	12	2,910	0.87	1.8	2.0	15	18	19.0	7.11	4,300	4,300
25-Jul-05	231.1	8	32	6	12	2,770	2.12	2.5	2.0	19	18	19.0	7.07	9,300	1,500
26-Jul-05	215.3	5	37	7	15	3,230	2.36	2.5	2.0	21	18	18.5	6.93	2,300	2,300
27-Jul-05	173.5	5	36	7	15	2,600	2.39	2.5	2.0	20	18	19.0	6.82	93,000	93,000
28-Jul-05	151.1	4	44	5	16	2,420	2.40	2.7	2.1	25	18	19.5	6.76	7,500	7,500
29-Jul-05	180.9	6	52	5	16	2,890	2.61	2.9	2.1	23	18	19.5	6.75	4,300	1,500
30-Jul-05	195.7	38	67	16	12	2,350	2.03	2.6	2.1	20	18	19.0	6.77	23,000	4,300
31-Jul-05	418.5	4	32	5	4	1,670	0.90	1.4	2.1	11	18	ns	ns	ns	ns
Total:	12190														
Max:	691.9														
Min:	151.1														
Average:	393.2	42	47	27	9	3,135	1.44	2.1		18		18.7	7.42		
Geo.Mean:														353,000	285,000

Notes:

- (1) * = 30 day rolling average
- (2) effluent ammonia load based upon Raw Sewage flows and Final NH3-N concentrations
- (3) nr - not recorded; na - not analyzed; ns - no sample
- (4) Final Effluent flow data unavailable
- (5) July 1 to 18 - Secondary treatment process shut-down due to high river levels, process fully restored by July 22
- (6)** During normal plant operation any flow greater than 400 ML/ day will by-pass the secondary process