City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
March, 2006

Date	Raw Sewage Daily Flow	Final Effluent 24 Hour Composite										Final Effluent Grab Sample			
		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)*	(oC)	(units)	MPN/100 mL ***	
1-Mar-06	165.1	17	26	10	31	5,120	3.23	3.0	4.7	36	41	14.5	6.87	4,300	4,300
2-Mar-06	170.8	15	32	8	32	5,470	3.30	3.8	4.7	45	41	14.5	6.65	7,500	3,800
3-Mar-06	168.6	15	28	8	33	5,560	3.63	3.8	4.7	41	41	14.5	6.82	4,300	4,300
4-Mar-06	166.8	16	62	9	32	5,340	3.92	3.8	4.6	39	41	15.0	6.86	4,300	4,300
5-Mar-06	165.8	15	23	8	32	5,310	3.93	4.0	4.6	40	41	14.5	6.92	9,300	7,500
6-Mar-06	185.5	14	24	8	30	5,570	3.69	3.7	4.6	38	40	14.5	6.80	23,000	23,000
7-Mar-06	181.7	8	22	6	29	5,270	3.31	3.7	4.6	36	40	14.5	6.82	93,000	12,000
8-Mar-06	183.9	10	27	7	28	5,150	3.41	3.9	4.5	39	40	14.5	6.84	4,300	1,500
9-Mar-06	204.5	13	25	8	30	6,140	3.41	4.0	4.5	40	40	14.5	6.81	43,000	23,000
10-Mar-06	204.9	14	30	6	27	5,530	3.06	3.5	4.5	35	40	14.5	6.84	43,000	43,000
11-Mar-06	194.1	7	14	5	29	5,630	3.32	3.3	4.4	34	40	14.0	7.02	23,000	23,000
12-Mar-06	185.1	13	27	7	30	5,550	3.71	4.0	4.4	38	40	14.0	6.97	9,300	4,300
13-Mar-06	175.5	7	21	6	30	5,270	3.91	4.3	4.3	38	40	13.5	6.87	9,300	9,300
14-Mar-06	172.1	7	26	7	30	5,160	3.87	3.6	4.2	36	39	14.0	6.80	43,000	7,500
15-Mar-06	175.9	10	24	7	30	5,280	3.90	4.5	4.1	43	39	14.5	6.78	43,000	15,000
16-Mar-06	170.6	10	36	9	30	5,120	3.85	4.5	4.1	41	39	14.5	6.77	23,000	23,000
17-Mar-06	179.6	11	29	8	32	5,750	4.34	4.7	4.1	42	39	15.0	nr	38,000	38,000
18-Mar-06	183.9	15	32	7	30	5,520	4.05	4.6	4.1	41	39	14.5	6.88	23,000	23,000
19-Mar-06	181.4	11	26	7	27	4,900	3.57	3.9	4.1	35	39	14.5	7.02	7,500	4,300
20-Mar-06	184.4	10	27	8	28	5,160	3.74	5.9	4.2	41	40	14.5	6.86	7,500	2,300
21-Mar-06	196.7	16	24	8	26	5,110	3.51	5.2	4.2	38	40	13.5	6.79	23,000	23,000
22-Mar-06	202.5	16	29	8	27	5,470	3.26	5.0	4.3	38	40	14.0	6.86	9,300	4,300
23-Mar-06	200.4	14	30	8	27	5,410	3.20	5.7	4.3	42	40	13.0	6.86	23,000	4,300
24-Mar-06	235.1	21	31	10	26	6,110	2.69	4.8	4.3	42	40	13.5	6.79	23,000	23,000
25-Mar-06	240.7	21	20	11	23	5,540	1.55	3.1	4.3	37	40	13.0	7.02	230,000	230,000
26-Mar-06	296.6	36	29	16	17	5,040	1.77	3.1	4.2	25	39	12.0	7.05	93,000	93,000
27-Mar-06	321.9	29	30	17	15	4,830	1.72	2.8	4.2	27	38	10.5	6.94	93,000	43,000
28-Mar-06	356.1	26	21	11	12	4,270	1.38	2.2	4.1	21	38	10.5	6.96	93,000	93,000
29-Mar-06	369.9	31	21	11	12	4,440	1.60	2.5	4.0	24	37	10.0	6.91	9,300	2,300
30-Mar-06	**506.1**	63	27	14	7	3,540	1.18	2.0	3.9	16	36	11.0	6.95	(15,000)	(15,000)
31-Mar-06	**661.3**	40	24	11	5	3,310	1.07	1.2	3.8	14	36	11.0	7.21	(150,000)	(93,000)
Total:	7188														
Max:	661														
Min:	165														
Average:	**231.9**	**18**	**27**	**9**	**26**	**5,190**	**3.10**	**3.8**		**36**		**13.6**	**6.88**		
Geo.Mean:														**20,200**	**12,300**

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 2684R.
(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.
(8) February 9 - plant shut-down for 4 hours which could affect 24 hour composite sample results for Feb. 8 and 9.