

City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
June 2009

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-Jun-09	76.7	17	40	8	22	1,648	2.62	3.6	3.2	25	24	14	6.71	130	79
2-Jun-09	67.2	10	23	6	22	1,466	2.18	3.0	3.2	25	25	14	6.75	140	70
3-Jun-09	64.7	8	21	5	24	1,526	3.16	3.7	3.2	26	25	nr	6.69	230	79
4-Jun-09	69.3	10	26	8	23	1,579	3.29	4.0	3.2	25	25	15	6.85	23	23
5-Jun-09	66.7	7	21	7	22	1,493	2.55	3.2	3.2	25	25	14	6.80	7,900	2,200
6-Jun-09	62.9	7	19	7	24	1,477	2.69	3.3	3.2	22	24	15	6.80	3,300	1,700
7-Jun-09	62.1	12	nr	nr	23	1,452	2.93	3.6	3.2	27	24	13	6.88	1,300	490
8-Jun-09	82.0	24	27	11	21	1,681	2.80	3.6	3.2	21	24	14	6.68	330	330
9-Jun-09	90.1	10	21	6	17	1,487	2.17	2.8	3.1	18	24	14	6.86	(790)	(220)
10-Jun-09	71.4	14	17	6	20	1,414	3.12	3.8	3.1	25	24	14	6.85	230	34
11-Jun-09	68.1	8	13	5	22	1,519	3.43	4.0	3.1	nr	24	14	6.86	220	70
12-Jun-09	65.1	6	12	4	24	1,555	3.13	3.6	3.2	24	24	15	6.71	79	33
13-Jun-09	62.5	8	19	6	23	1,424	2.68	3.4	3.2	23	24	14	6.74	79	79
14-Jun-09	61.3	14	27	6	23	1,398	2.91	3.5	3.2	24	24	15	6.75	70	70
15-Jun-09	64.4	10	17	6	23	1,475	3.32	4.1	3.3	23	24	15	6.69	79	49
16-Jun-09	64.4	12	17	5	24	1,538	3.42	3.9	3.3	24	25	16	6.78	230	230
17-Jun-09	60.3	7	20	4	25	1,488	3.82	4.6	3.4	25	25	16	6.77	490	220
18-Jun-09	60.7	9	17	4	25	1,536	4.07	4.8	3.5	24	25	15	6.74	430	170
19-Jun-09	59.6	<4	17	4	24	1,418	3.39	4.2	3.5	25	25	15	6.68	130	79
20-Jun-09	56.6	11	14	4	22	1,263	2.95	4.0	3.5	25	25	16	6.80	17	11
21-Jun-09	56.6	11	15	5	24	1,365	3.22	nr	3.5	nr	25	16	6.71	22	11
22-Jun-09	56.6	10	22	5	25	1,405	3.57	4.3	3.6	29	25	15	6.71	330	330
23-Jun-09	58.4	8	19	5	25	1,477	3.39	3.9	3.6	30	25	15	6.44	46	33
24-Jun-09	57.4	7	22	4	25	1,429	3.62	4.3	3.5	26	25	16	6.63	79	33
25-Jun-09	64.4	9	23	5	25	1,637	4.09	4.6	3.6	27	25	17	6.54	280	49
26-Jun-09	68.5	32	36	18	nr	nr	nr	4.0	3.7	nr	25	18	6.59	27	27
27-Jun-09	174.4	29	41	24	8	1,421	0.88	1.5	3.6	16	24	16	6.93	(54000)	(54000)
28-Jun-09	134.4	20	21	9	9	1,253	1.36	1.8	3.6	18	24	15	7.17	(1300)	(170)
29-Jun-09	97.1	7	25	5	14	1,320	2.11	2.6	3.6	17	24	15	6.97	170	110
30-Jun-09	80.1	11	23	7	17	1,330	2.35	2.8	3.6	18	24	16	6.97	(4900)	(3300)
Max:	174.4														
Min:	56.6														
Average:	72.8	12	22	7	21	1,465	2.94	3.6		24		15	6.77		
Geo.Mean:														168	89

- 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.