

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
September 2012**

Licence 2716RR	Raw Sewage	Final Effluent 24 Hour Composite										Final Effluent Grab Sample		
		TSS		BOD5		cBOD5		Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	E.Coli
		(mg/L)	(mg/L)*	(mg/L)	(mg/L)*	(mg/L)	(mg/L)*	(kg NH3-N/day)	(mg/L-P)	(mg/L-P)*	(mg/L-N)*	(°C)	(units)	MPN/100 mL
1-Sep-12	46.6	12	10	14	14	7	8	1,407	3.91	3.8	35	21	6.61	9
2-Sep-12	44.6	6	10	10	13	6	8	1,363	3.91	3.8	35	20	6.55	<3
3-Sep-12	49.7	nr	10	nr	13	nr	8	nr	nr	3.8	34	20	6.51	<3
4-Sep-12	51.2	8	10	10	13	9	8	1,604	4.29	3.8	35	20	6.58	15
5-Sep-12	52.2	7	9	9	13	8	8	1,701	3.92	3.9	35	20	6.49	<3
6-Sep-12	54.0	8	9	10	12	9	8	1,837	3.98	3.9	35	20	6.55	43
7-Sep-12	51.3	4	9	11	12	8	8	1,699	3.84	3.9	35	20	6.56	43
8-Sep-12	49.0	8	9	10	12	9	7	1,670	4.04	3.9	35	20	6.46	93
9-Sep-12	50.7	15	9	11	12	9	8	1,734	4.23	3.9	35	nr	6.53	43
10-Sep-12	51.7	8	9	13	12	10	8	1,660	4.06	3.9	35	20	6.47	150
11-Sep-12	50.2	18	9	14	12	12	8	1,643	3.79	3.8	36	20	6.53	93
12-Sep-12	51.7	13	9	12	12	10	8	1,783	4.07	3.9	36	20	6.53	430
13-Sep-12	50.7	11	9	12	12	10	8	1,702	3.66	3.9	36	20	6.55	230
14-Sep-12	51.0	9	9	12	12	11	8	1,678	3.72	3.9	36	20	6.49	75
15-Sep-12	49.2	9	10	13	12	10	8	1,573	3.71	3.9	37	20	6.54	380
16-Sep-12	50.1	12	10	12	13	10	9	1,743	4.15	4.0	37	20	6.54	200
17-Sep-12	49.9	9	10	nr	13	nr	9	1,747	4.07	4.0	37	19	6.51	930
18-Sep-12	50.8	10	10	nr	13	nr	9	1,749	3.92	4.0	37	20	6.53	200
19-Sep-12	50.6	13	10	nr	13	nr	9	1,660	4.02	4.0	38	19	6.62	730
20-Sep-12	49.3	14	10	nr	13	nr	9	1,735	4.20	4.1	38	19	6.80	930
21-Sep-12	49.2	10	10	nr	12	nr	9	1,677	3.89	4.1	38	19	6.56	160
22-Sep-12	48.8	<4	10	nr	12	nr	9	1,674	4.15	4.1	38	19	6.56	9
23-Sep-12	49.5	13	10	10	12	8	9	1,678	4.30	4.1	38	19	6.59	93
24-Sep-12	50.2	11	10	11	12	9	9	1,646	4.15	4.2	39	19	6.52	930
25-Sep-12	49.1	11	10	11	12	9	9	1,680	4.14	4.2	39	19	6.54	380
26-Sep-12	49.1	9	10	10	11	8	9	1,764	4.12	4.3	39	19	6.60	9
27-Sep-12	48.3	8	10	9	11	6	9	1,739	4.21	4.3	39	19	6.55	43
28-Sep-12	49.6	10	10	11	11	8	9	1,710	4.12	4.3	39	19	6.59	9
29-Sep-12	48.8	8	10	11	11	9	9	1,692	4.13	4.3	40	19	6.55	38
30-Sep-12	49.1	21	10	18	11	13	9	1,630	4.22	4.3	40	19	6.59	29
Max:	54.0													
Min:	44.6													
Average:	49.9	10		11		9		1,619	4.03			20	6.55	
Total Flow:	1496.2													
Geo.Mean:														62

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 27 of Licence 2716RR
- (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
- (8) Total Nitrogen results are calculated from TKN and nitrate values