

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
October 2013**

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-Oct-13	53.4	5	11	17	26	5	8	1,576	2.84	4.2	40	19	6.62	4
2-Oct-13	49.6	7	11	15	25	5	8	1,517	3.22	4.1	40	19	6.69	4
3-Oct-13	48.5	6	10	17	24	6	8	1,538	3.52	4.1	40	19	6.58	15
4-Oct-13	48.1	6	10	21	24	6	7	1,581	3.84	4.1	40	18	6.62	9
5-Oct-13	48.1	12	10	17	23	6	7	1,541	3.85	4.1	40	18	6.55	4
6-Oct-13	49.9	11	10	19	23	7	7	1,581	3.70	4.1	40	18	6.51	15
7-Oct-13	52.0	9	10	18	22	6	7	1,545	3.57	4.1	40	19	6.53	23
8-Oct-13	48.6	12	10	22	22	6	7	1,555	4.36	4.1	40	19	6.64	23
9-Oct-13	48.4	11	10	21	22	8	7	1,650	4.08	4.1	40	19	6.74	<3
10-Oct-13	49.1	14	10	25	22	10	7	1,634	3.67	4.1	40	19	6.64	43
11-Oct-13	48.5	13	10	nr	21	nr	7	1,536	2.88	4.1	40	19	6.72	930
12-Oct-13	55.4	11	10	19	21	8	7	1,485	2.79	4.0	40	18	6.64	1,500
13-Oct-13	49.9	10	10	18	21	7	7	1,437	2.32	4.0	39	18	6.58	640
14-Oct-13	49.2	7	10	nr	20	nr	6	1,583	3.22	4.0	39	18	6.64	9,300
15-Oct-13	49.7	7	10	20	20	6	6	1,545	2.90	4.0	39	18	6.60	4,300
16-Oct-13	49.2	8	9	nr	19	nr	6	1,630	3.01	4.0	39	18	6.66	2,300
17-Oct-13	50.8	10	9	19	19	6	6	1,606	3.17	4.0	39	18	6.55	150
18-Oct-13	49.1	10	9	nr	18	nr	6	1,610	2.68	3.9	39	18	6.72	43
19-Oct-13	48.5	9	9	14	17	6	6	1,626	3.60	3.9	39	18	6.67	43
20-Oct-13	49.6	10	9	15	17	6	6	1,636	3.77	3.9	40	18	6.62	93
21-Oct-13	48.5	9	9	17	17	10	6	1,599	2.93	3.9	40	18	6.51	210
22-Oct-13	47.9	13	10	17	16	8	6	1,515	3.05	3.8	40	18	6.62	43
23-Oct-13	47.0	10	10	17	16	9	6	1,618	2.96	3.8	40	17	6.77	430
24-Oct-13	46.8	12	10	17	16	9	6	1,628	3.01	3.8	40	18	6.68	44
25-Oct-13	47.5	6	10	15	16	6	6	1,535	3.43	3.8	40	18	6.64	<3
26-Oct-13	48.0	5	10	12	16	5	6	1,492	3.91	3.8	40	18	6.60	<3
27-Oct-13	49.0	6	9	17	16	5	6	1,617	4.25	3.8	40	18	6.59	4
28-Oct-13	48.4	6	9	nr	15	nr	6	1,515	4.02	3.9	40	18	6.54	23
29-Oct-13	47.4	5	9	15	15	5	6	1,531	3.77	3.9	41	18	6.63	3
30-Oct-13	47.2	4	9	15	15	6	6	1,549	3.87	3.9	41	18	6.63	15
31-Oct-13	46.4	7	9	16	15	4	6	1,744	4.54	4.0	41	18	6.61	38
Max:	55.4													
Min:	46.4													
Average:	49.0	9		18		7		1,573	3.44			18	6.62	
Total Flow:	1519.7													
Geo.Mean:														43

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