

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
September 2014**

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-14	76.2	6	9	nr	15	nr	7	1,363	1.87	3.4	33	18	6.85	23
2-Sep-14	73.9	11	9	17	15	10	8	1,618	2.53	3.4	32	18	6.83	7
3-Sep-14	70.6	5	9	nr	14	nr	7	1,510	2.31	3.3	32	18	6.95	93
4-Sep-14	71.7	7	9	nr	14	nr	7	1,715	2.53	3.3	32	18	6.78	(43)
5-Sep-14	69.8	9	9	13	14	6	7	1,627	2.47	3.3	31	18	6.78	23
6-Sep-14	65.7	10	10	nr	13	nr	7	1,595	2.66	3.2	31	18	6.82	9
7-Sep-14	62.9	9	10	nr	13	nr	7	1,611	2.86	3.2	31	18	6.79	6
9-Sep-14	61.0	6	10	18	13	9	7	1,573	3.01	3.2	31	18	6.72	230
10-Sep-14	57.0	6	10	18	13	6	7	1,607	3.17	3.2	31	18	6.71	23
11-Sep-14	55.9	4	9	21	13	7	7	1,570	3.44	3.2	31	18	6.63	23
8-Sep-14	55.5	5	9	15	13	8	7	1,608	3.62	3.1	31	18	6.73	23
12-Sep-14	55.4	9	9	21	14	7	7	1,680	4.01	3.1	30	18	6.81	4
13-Sep-14	55.7	8	9	27	14	8	7	1,650	3.74	3.1	30	18	6.74	<3
14-Sep-14	56.5	10	9	28	14	8	7	1,655	3.56	3.1	30	18	6.63	7
15-Sep-14	54.9	11	9	30	15	12	8	1,558	3.48	3.1	30	18	6.73	230
16-Sep-14	52.1	9	9	24	15	9	7	1,543	3.70	3.1	30	18	6.74	93
17-Sep-14	48.9	12	9	22	15	10	7	1,535	3.84	3.2	31	nr	nr	nr
18-Sep-14	53.7	8	9	22	16	8	8	1,682	3.81	3.2	31	18	6.74	150
19-Sep-14	55.4	7	9	17	16	7	8	1,745	3.66	3.2	31	18	6.73	230
20-Sep-14	65.3	15	9	21	16	12	7	1,744	3.22	3.2	31	18	6.68	15
21-Sep-14	56.5	6	9	17	16	7	7	1,481	2.97	3.3	31	18	6.63	4
22-Sep-14	55.4	9	8	14	16	7	7	1,591	3.34	3.3	32	18	6.60	43
23-Sep-14	53.9	9	8	12	16	6	7	1,595	3.41	3.4	32	18	6.69	43
24-Sep-14	52.8	9	8	13	16	6	7	1,619	3.50	3.4	33	18	7.04	43
25-Sep-14	52.4	6	8	12	15	7	7	1,710	3.68	3.5	33	19	6.66	93
26-Sep-14	52.9	6	8	12	15	7	7	1,730	3.85	3.5	33	19	6.72	93
27-Sep-14	52.1	10	8	11	15	6	7	1,687	3.64	3.5	33	19	6.70	43
28-Sep-14	59.1	9	8	14	15	8	7	1,773	3.45	3.5	34	18	6.68	9
29-Sep-14	53.9	6	8	12	15	7	7	1,552	2.88	3.6	34	18	6.70	43
30-Sep-14	53.0	8	8	28	15	6	6	1,564	3.40	3.6	34	18	6.74	230
Max:	76.2													
Min:	48.9													
Average:	58.7	8		18		8		1,616	3.25			18	6.74	
Total Flow:	1760.0													
Geo.Mean:														30

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