

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
December 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-Dec-14	46.8	8	10	19	19	13	10	1,787	4.01	4.8	44	15	6.64	<3
2-Dec-14	46.2	9	9	21	19	13	10	1,731	4.23	4.8	44	15	6.73	14
3-Dec-14	48.3	7	9	18	18	8	10	1,859	4.39	4.8	44	15	6.65	23
4-Dec-14	46.9	9	9	18	18	14	10	1,791	4.55	4.8	44	15	6.61	15
5-Dec-14	46.6	5	9	13	18	9	10	1,841	4.36	4.8	44	16	6.73	23
6-Dec-14	47.2	6	8	15	18	8	10	1,872	4.38	4.7	44	15	6.74	7
7-Dec-14	47.7	9	8	16	17	7	10	1,881	4.84	4.8	44	16	6.59	23
8-Dec-14	46.0	8	8	20	18	13	10	1,770	3.96	4.8	44	15	6.81	9
9-Dec-14	44.7	7	8	13	17	7	10	1,762	4.06	4.7	44	15	6.66	23
10-Dec-14	44.5	10	8	18	17	12	10	1,472	3.65	4.8	44	15	6.64	23
11-Dec-14	46.3	8	8	18	17	8	10	1,617	3.72	4.7	44	15	6.57	23
12-Dec-14	46.1	8	8	18	17	11	10	1,656	3.85	4.7	44	15	6.70	4
13-Dec-14	47.1	13	8	16	17	7	10	1,692	3.95	4.7	44	15	6.67	4
14-Dec-14	49.9	9	8	20	17	7	10	1,752	3.78	4.7	44	15	6.57	9
15-Dec-14	46.9	8	8	nr	16	nr	9	1,560	3.51	4.7	44	15	6.69	23
16-Dec-14	45.9	8	8	nr	15	nr	9	1,588	3.86	4.6	44	15	6.67	9
17-Dec-14	44.8	13	8	21	15	11	9	1,585	4.02	4.6	44	15	6.77	21
18-Dec-14	44.6	10	8	20	15	11	9	1,575	4.12	4.6	44	15	6.66	9
19-Dec-14	44.3	10	8	17	15	10	9	1,727	4.37	4.6	44	15	6.75	23
20-Dec-14	44.4	18	8	24	15	11	9	1,688	4.19	4.6	44	15	6.75	21
21-Dec-14	44.4	10	9	26	16	11	9	1,690	4.13	4.6	44	15	6.64	43
22-Dec-14	40.4	18	9	28	16	17	9	1,431	3.92	4.6	44	15	6.64	230
23-Dec-14	44.9	21	9	29	17	17	9	1,684	3.87	4.6	44	15	6.72	930
24-Dec-14	51.8	19	10	32	17	22	10	1,957	4.05	4.6	44	15	6.79	230
25-Dec-14	40.5	21	10	30	18	16	10	1,786	4.41	4.6	44	15	6.59	230
27-Dec-14	41.2	19	11	24	18	14	10	1,541	3.72	4.6	44	14	6.68	93
26-Dec-14	42.7	11	11	26	19	13	10	1,842	4.42	4.6	44	14	6.69	15
28-Dec-14	42.9	20	11	28	19	17	11	1,828	4.15	4.6	44	14	6.66	230
29-Dec-14	43.2	15	11	25	20	17	11	1,718	4.11	4.6	45	14	6.62	93
30-Dec-14	43.3	16	12	30	20	19	11	1,602	3.94	4.6	44	13	6.59	43
31-Dec-14	45.6	13	12	25	20	13	11	1,645	3.78	4.5	44	14	6.55	23
Max:	51.8													
Min:	40.4													
Average:	45.4	12		22		12		1,708	4.07			15	6.67	
Total Flow:	1406.0													
Geo.Mean:														26

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