

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
March 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-Mar-14	47.0	10	8	14	14	12	9	1,730	4.17	4.4	44	13	6.68	43
2-Mar-14	48.4	13	8	17	15	11	9	1,723	4.03	4.4	44	13	6.71	150
3-Mar-14	46.9	13	8	17	15	13	9	1,609	3.83	4.4	44	12	6.54	9,300
4-Mar-14	45.7	14	8	41	16	11	9	1,605	4.03	4.4	44	13	6.59	15
5-Mar-14	45.5	12	8	17	16	12	9	1,608	4.07	4.4	44	12	6.54	11
6-Mar-14	46.0	11	8	17	16	12	9	1,623	4.10	4.4	44	12	6.69	93
7-Mar-14	46.2	14	9	18	16	13	9	1,671	4.08	4.4	44	12	6.59	1,200
8-Mar-14	48.1	18	9	24	17	14	10	1,759	4.22	4.4	44	13	6.65	15
9-Mar-14	46.0	15	9	28	17	19	10	1,683	4.20	4.5	45	13	6.47	9
10-Mar-14	51.7	16	10	nr	17	nr	10	1,902	4.06	4.5	45	13	6.48	93
11-Mar-14	51.1	23	10	57	19	19	11	1,703	3.79	4.5	45	14	6.64	43
12-Mar-14	47.2	15	11	20	19	13	11	1,694	4.01	4.5	45	13	6.53	1,200
13-Mar-14	48.4	12	11	20	19	16	11	1,860	4.28	4.5	45	13	6.59	15
14-Mar-14	48.3	14	11	18	19	12	12	1,776	4.17	4.5	45	13	6.60	430
15-Mar-14	48.6	13	12	19	19	13	12	1,788	4.21	4.6	45	13	6.68	46,000
16-Mar-14	49.4	11	12	20	19	13	12	1,773	4.10	4.6	45	12	6.67	110,000
17-Mar-14	47.6	10	12	21	20	19	13	1,585	3.66	4.5	45	13	6.65	230
18-Mar-14	47.0	12	12	19	20	12	13	1,677	3.97	4.5	45	13	6.63	1,500
19-Mar-14	49.0	12	12	13	19	12	13	1,692	4.02	4.6	45	13	6.63	930
20-Mar-14	50.2	12	12	14	19	12	13	1,758	3.64	4.6	45	13	6.58	930
21-Mar-14	48.9	8	12	13	19	11	13	1,618	3.55	4.5	45	13	6.61	43
22-Mar-14	48.1	13	12	21	19	13	13	1,635	3.77	4.5	45	12	6.72	23
23-Mar-14	49.9	15	12	21	20	13	13	1,788	3.85	4.5	45	12	6.49	9
24-Mar-14	48.6	10	12	14	20	12	13	1,711	3.88	4.5	45	12	6.57	230
25-Mar-14	47.3	15	12	21	20	15	13	1,717	3.98	4.6	45	13	6.61	150
26-Mar-14	47.0	11	13	nr	20	nr	13	1,639	3.85	4.6	45	13	6.58	24,000
27-Mar-14	48.2	8	13	13	20	11	13	1,681	3.75	4.6	45	13	6.57	15
28-Mar-14	48.5	9	13	14	20	10	13	1,673	3.56	4.5	45	13	6.67	4
29-Mar-14	48.3	10	13	14	20	10	13	1,666	3.64	4.5	45	13	6.58	<3
30-Mar-14	53.0	10	13	16	20	11	13	1,732	3.46	4.5	45	13	6.58	4
31-Mar-14	50.6	9	13	14	20	9	13	1,562	3.21	4.5	44	13	6.55	7
Max:	53.0													
Min:	45.5													
Average:	48.3	13		20		13		1,698	3.91			13	6.60	
Total Flow:	1496.5													
Geo.Mean:														126

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