

**City of Winnipeg  
Water and Waste Department  
South End Water Pollution Control Centre Monitoring Data  
December 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-Dec-12	50.5	8	10	nr	33	nr	7	1,500	3.31	4.0	40	15	6.65	75
2-Dec-12	51.0	11	10	>39	34	10	8	1,600	3.61	4.0	40	15	6.64	9
3-Dec-12	52.2	8	10	>40	34	10	8	1,571	3.63	4.0	40	16	6.64	150
4-Dec-12	50.2	10	10	40	34	8	8	1,460	3.01	4.0	40	16	6.59	9
5-Dec-12	49.2	9	10	38	34	8	8	1,568	3.85	4.0	40	16	6.57	43
6-Dec-12	48.6	8	10	49	34	9	8	1,496	3.68	4.0	40	16	6.67	9
7-Dec-12	48.6	10	10	nr	34	nr	8	1,560	3.16	4.0	40	15	6.68	43
8-Dec-12	49.2	6	10	38	34	7	8	1,590	3.87	4.0	40	15	6.60	7
9-Dec-12	49.4	8	10	50	35	7	8	1,438	4.26	4.0	40	15	6.63	9
10-Dec-12	47.6	9	10	56	36	10	8	1,533	3.63	4.0	40	15	6.60	43
11-Dec-12	54.3	9	10	40	36	8	8	1,743	3.88	4.0	40	14	6.62	38
12-Dec-12	47.6	8	10	37	36	7	8	1,528	3.29	4.0	40	15	6.66	210
13-Dec-12	47.1	10	10	54	37	7	8	1,541	3.91	4.0	40	15	6.86	9
14-Dec-12	46.9	5	10	10	37	5	8	1,706	3.26	4.0	40	15	6.69	4
15-Dec-12	48.4	11	10	46	38	11	8	1,563	3.42	4.0	40	15	6.75	23
16-Dec-12	48.8	13	10	36	38	13	8	1,024	2.70	4.0	40	17	6.67	43
17-Dec-12	47.1	13	10	43	39	12	9	1,419	3.35	4.0	40	16	6.54	430
18-Dec-12	46.7	11	10	nr	39	nr	9	1,454	3.52	4.0	40	16	6.64	23
19-Dec-12	46.6	8	10	38	40	12	9	1,460	3.58	4.1	40	15	6.66	150
20-Dec-12	47.0	12	10	35	39	10	9	1,447	3.13	4.1	41	15	6.72	230
21-Dec-12	47.5	11	11	39	40	12	9	1,454	3.34	4.1	41	15	6.67	1500
22-Dec-12	48.4	11	11	32	40	11	10	1,462	3.48	4.1	41	14	6.63	21
23-Dec-12	47.6	9	11	29	39	8	10	1,376	3.02	4.1	41	14	6.66	23
24-Dec-12	48.5	6	11	25	39	7	10	1,426	2.88	4.1	40	14	6.55	9
25-Dec-12	42.9	6	11	17	38	6	10	1,323	3.39	4.1	40	13	6.63	4
26-Dec-12	43.7	8	10	21	37	7	9	1,646	3.97	4.1	40	13	6.65	15
27-Dec-12	45.7	8	9	19	36	7	9	1,678	4.32	4.1	41	14	6.56	9
28-Dec-12	46.5	8	9	19	36	7	9	1,621	4.13	4.1	41	15	6.56	9
29-Dec-12	45.2	7	9	19	35	6	9	1,112	3.80	4.1	40	14	6.53	<3
30-Dec-12	44.2	11	9	21	34	6	9	1,499	3.87	4.1	40	14	6.70	<3
31-Dec-12	48.2	6	9	22	34	6	8	1,632	3.94	4.1	40	14	6.56	<3
<b>Max:</b>	54.3													
<b>Min:</b>	42.9													
<b>Average:</b>	<b>47.9</b>	<b>9</b>		<b>34</b>		<b>8</b>		<b>1,498</b>	<b>3.55</b>			<b>15</b>	<b>6.64</b>	
<b>Total Flow:</b>														
<b>Geo.Mean:</b>														<b>22</b>

**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