

City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
September 2017

Licence 2684 RRR	File # 1071.10	Final Effluent 24 Hour Composite							Final Effluent Grab Sample					
		Date	Raw Sewage Daily Flow	TSS	BOD5	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
			ML**	(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-17	139.7	21	19	9	4,010	4.55	4.8	40.6	20.8	6.67	179	261		
2-Sep-17	123.8	21	19	8	3,454	4.57	4.9	40.8	20.8	6.76	365	308		
3-Sep-17	119.6	18	20	9	2,943	5.14	5.0	41.0	20.7	6.84	142	167		
4-Sep-17	163.2	28	23	12	3,671	4.96	5.1	41.3	20.4	6.66	308	387		
5-Sep-17	136.0	19	17	9	3,101	3.89	5.1	41.2	19.7	6.64	579	649		
6-Sep-17	130.3	29	19	10	3,518	4.17	5.2	41.4	20.1	6.68	146	199		
7-Sep-17	136.6	27	24	13	4,083	4.67	5.2	41.6	20.4	6.63	236	179		
8-Sep-17	136.3	35	24	13	4,267	4.56	5.3	41.8	20.4	6.56	179	139		
9-Sep-17	118.6	38	27	14	3,903	4.80	5.4	42.0	20.4	6.81	1,050	1,120		
10-Sep-17	125.9	37	27	17	3,803	4.13	5.5	42.0	20.6	6.84	365	365		
11-Sep-17	138.5	41	21	12	4,264	4.69	5.6	41.8	20.6	6.66	579	1,410		
12-Sep-17	134.4	32	27	14	4,275	5.19	5.6	41.6	20.8	6.71	159	47		
13-Sep-17	139.1	34	28	15	4,494	4.78	5.7	41.3	20.9	6.80	980	1,300		
14-Sep-17	134.2	24	28	15	4,510	4.77	5.7	41.4	20.8	6.68	1,300	>2,420		
15-Sep-17	137.8	33	40	25	4,575	4.88	5.8	41.5	20.4	6.75	248	276		
16-Sep-17	218.6	28	30	16	4,021	2.22	5.8	40.8	17.1	6.72	>2,420	1,050		
17-Sep-17	185.5	21	15	8	3,505	1.86	5.7	39.7	18.1	6.80	261	488		
18-Sep-17	135.5	25	14	8	3,481	3.23	5.7	39.4	19.1	6.76	58	51		
19-Sep-17	137.7	22	18	10	4,394	5.18	5.7	39.1	19.8	6.70	96	84		
20-Sep-17	216.9	24	20	11	4,858	2.99	5.6	38.5	19.2	6.90	132	210		
21-Sep-17	143.2	16	17	9	3,967	3.25	5.5	38.2	19.7	6.83	196	59		
22-Sep-17	212.6	52	39	25	5,762	3.48	5.5	37.7	20.0	6.74	22	39		
23-Sep-17	218.5	17	18	9	3,474	1.27	5.4	36.9	17.8	6.68	64	59		
24-Sep-17	447.0	67	34	24	5,096	1.10	5.3	35.8	16.3	6.83	(>2,420)	(>2,420)		
25-Sep-17	189.0	14	9	5	2,552	1.02	5.2	34.7	17.0	6.84	135	111		
26-Sep-17	263.7	30	25	19	5,300	2.60	5.1	34.6	18.6	6.80	45	45		
27-Sep-17	170.6	10	10	5	2,832	1.84	5.0	34.4	17.8	6.77	93	91		
28-Sep-17	153.6	11	16	7	3,731	3.27	4.9	34.6	18.9	6.94	261	326		
29-Sep-17	144.3	13	19	8	3,969	4.02	4.9	35.0	19.3	6.76	16	8		
30-Sep-17	138.0	15	20	7	3,766	4.34	4.9	35.1	19.5	6.74	7	10		
Max:	447.0													
Min:	118.6													
Average:	166.3	27	22	12	3,986	3.71			19.5	6.75				
Total Flow:	4988.7													
Geo.Mean:											180	181		

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 380 ML/D per clause 26 of Licence 2684RRR
- (6) Bracketed Coliform results not used in the Geometric Mean calculation
- (7) Raw wastewater flows in excess of 400 ML/D will by-pass the secondary process and flows in excess of 675 ML/D will cause raw sewage to by-pass the plant