City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
August 2019

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-Aug-19	148.7	12	12	4	4,773	4.44	3.7	37.6	20.2	6.74	100	120
2-Aug-19	147.8	8	12	5	4,671	4.27	3.7	37.4	20.4	6.73	30	20
3-Aug-19	130.6	8	11	5	4,008	4.12	3.7	37.1	20.6	6.74	20	20
4-Aug-19	127.7	10	11	5	3,781	3.95	3.7	36.8	20.6	6.68	10	30
5-Aug-19	132.1	13	13	5	3,554	4.17	3.7	36.3	20.2	6.69	10	40
6-Aug-19	138.5	10	15	5	3,768	4.32	3.7	36.1	20.3	6.64	50	20
7-Aug-19	138.5	16	17	7	4,196	4.40	3.7	36.2	20.1	6.71	10	20
8-Aug-19	146.1	16	19	6	4,500	4.30	3.8	36.6	20.0	6.70	40	50
9-Aug-19	143.4	20	nr	nr	4,432	4.20	3.9	37.4	20.3	6.69	80	50
10-Aug-19	223.5	68	>70	>39	5,365	3.78	4.0	37.5	19.9	6.60	40	60
11-Aug-19	144.8	30	23	17	2,230	1.13	4.0	36.8	20.4	6.53	17,300	24,200
12-Aug-19	135.8	ns	ns	ns	ns	ns	4.0	36.7	20.0	6.54	450	230
13-Aug-19	153.1	21	13	7	4,532	2.42	4.0	37.6	20.1	6.66	160	190
14-Aug-19	142.6	20	13	5	5,105	3.74	4.1	38.8	20.3	6.76	610	410
15-Aug-19	161.9	17	12	5	5,035	3.28	4.1	39.1	20.1	6.71	910	740
16-Aug-19	142.1	13	nr	nr	4,674	3.55	4.1	39.0	20.4	6.70	340	140
17-Aug-19	128.1	14	13	4	4,099	4.16	4.1	39.0	20.2	6.71	110	120
18-Aug-19	127.7	18	12	5	4,315	4.07	4.2	39.5	20.4	6.72	110	120
19-Aug-19	134.7	50	nr	nr	4,204	5.31	4.2	39.7	20.1	6.64	20	70
20-Aug-19	227.2	19	15	8	3,725	2.31	4.2	39.1	19.5	6.64	3,870	8,160
21-Aug-19	138.6	12	14	5	3,978	2.67	4.1	39.3	20.0	6.52	360	300
22-Aug-19	136.6	10	22	8	4,588	3.79	4.1	39.8	20.4	6.61	180	150
23-Aug-19	134.2	11	12	7	4,107	4.15	4.1	40.2	20.3	6.75	190	230
24-Aug-19	126.0	16	25	8	3,892	4.41	4.1	40.6	20.4	6.67	30	20
25-Aug-19	336.5	33	40	17	5,149	1.85	4.1	40.1	19.6	6.56	500	620
26-Aug-19	320.8	18	18	9	4,107	1.18	4.0	39.4	19.3	6.66	1,020	700
27-Aug-19	292.2	13	11	5	6,166	2.37	4.0	39.3	18.5	6.71	3,260	4,350
28-Aug-19	172.1	7	10	4	4,457	3.56	4.0	39.4	19.3	6.69	430	310
29-Aug-19	141.1	8	12	6	3,740	4.44	4.0	39.5	19.7	6.55	400	400
30-Aug-19	149.8	13	17	5	3,729	3.96	4.0	39.5	20.0	6.56	400	420
31-Aug-19	280.8	75	39	18	3,510	2.00	4.0	38.9	17.7	6.61	(>24200)	(>24200)
Max:	336.5											
Min:	126.0											
Average:	**167.9**	**20**	**17**	**7**	**4,280**	**3.54**			**20.0**	**6.66**		
Total Flow:	**5203.6**											
Geo.Mean:											**165**	**177**
											.	

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