

**City of Winnipeg
Water and Waste Department
North End Water Pollution Control Centre Monitoring Data
December 2020**

Licence 2684 RRR	File # 1071.10	Final Effluent 24 Hour Composite							Final Effluent Grab Sample					
		Date	Raw Sewage Daily Flow ML	TSS	BOD5	cBOD5	Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	Fecal Coliform	E.Coli
				(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-20	128.4	16	12	8	5,047	5.04	5.4	50.8	15.2	6.66	50	10		
2-Dec-20	130.1	14	12	7	4,891	4.37	5.5	51.0	15.5	6.62	<10	30		
3-Dec-20	127.3	14	12	7	5,004	4.54	5.5	51.1	15.6	6.80	80	100		
4-Dec-20	123.4	12	11	7	5,404	5.52	5.5	51.2	15.9	6.73	20	40		
5-Dec-20	125.4	18	12	7	5,352	4.76	5.5	51.1	15.9	6.71	10	10		
6-Dec-20	120.4	12	18	9	4,814	4.78	5.6	51.0	15.2	6.73	20	20		
7-Dec-20	126.0	15	23	8	4,636	4.63	5.6	50.8	15.8	6.72	10	30		
8-Dec-20	126.7	20	23	9	4,638	4.66	5.6	50.8	15.8	6.72	10	10		
9-Dec-20	121.9	19	27	11	4,669	5.96	5.6	50.8	16.0	6.70	20	20		
10-Dec-20	202.7	15	24	10	5,615	3.16	5.6	50.3	13.0	6.87	160	260		
11-Dec-20	121.0	8	nr	nr	4,451	3.19	5.5	50.2	14.0	6.73	10	50		
12-Dec-20	122.0	10	24	6	4,087	4.22	5.5	50.1	14.9	6.72	20	20		
13-Dec-20	128.5	11	24	7	4,306	4.02	5.5	49.9	14.6	6.81	210	160		
14-Dec-20	130.2	12	20	6	4,102	3.93	5.5	49.7	14.0	6.87	210	270		
15-Dec-20	117.1	11	18	6	3,981	4.45	5.4	49.5	14.1	6.77	30	40		
16-Dec-20	131.9	10	17	6	4,907	4.46	5.4	49.7	14.5	6.84	20	30		
17-Dec-20	132.5	10	17	6	4,755	4.49	5.4	49.8	15.0	6.83	20	50		
18-Dec-20	121.6	11	18	6	4,595	4.73	5.4	49.8	14.4	6.86	8,160	8,160		
19-Dec-20	128.3	9	17	6	4,786	4.41	5.4	49.7	14.4	6.85	200	170		
20-Dec-20	119.2	14	15	6	4,624	4.46	5.3	49.7	14.4	6.76	400	450		
21-Dec-20	130.3	11	17	7	4,744	4.19	5.3	49.5	14.1	6.71	100	120		
22-Dec-20	126.7	18	11	6	4,802	4.77	5.3	49.4	14.2	6.86	210	230		
23-Dec-20	131.8	14	9	5	4,705	4.58	5.3	49.2	13.1	6.88	140	240		
24-Dec-20	130.6	11	9	6	5,039	5.01	5.3	49.1	13.5	6.78	30	30		
25-Dec-20	111.8	13	7	5	4,293	4.82	5.4	49.1	14.2	6.75	20	40		
26-Dec-20	114.5**	14	13	nr	4,224	4.77	5.4	49.1	13.9	6.73	60	50		
27-Dec-20	117.1	16	14	8	4,252	4.43	5.4	49.2	13.6	6.83	100	190		
28-Dec-20	128.5	13	17	6	4,691	4.06	5.4	49.2	13.7	6.88	120	110		
29-Dec-20	124.9	9	14	6	5,208	4.69	5.4	49.6	13.9	6.88	50	70		
30-Dec-20	132.7	13	14	7	5,746	4.33	5.4	49.9	13.9	6.81	350	250		
31-Dec-20	131.9	13	17	6	5,764	4.52	5.4	50.1	14.0	6.89	340	390		
Max:	202.7													
Min:	111.8													
Average:	127.9	13	16	7	4,778	4.51			14.5	6.78				
Total Flow:	3,965.3													
Geo.Mean:											60	77		

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) 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
- (6) ** A power outage caused an inaccurate daily flow reading; an average of the December 25 and 27 flows were used in order to calculate the ammonia load for December 26