



March 12, 2024

Mr. Don Turner
Environmental Project Officer
Water Security Agency
Suite 300 – 2365 Albert Street
Regina, SK S4P 4K1

Dear Mr. Turner:

RE: Monthly Report: **February 2024**

In compliance with the City of Regina “Permit to Operate a Sewage Works” # 0050853-08-00 please find attached the monthly report for February 2024.

I trust this meets with your approval, should you have any questions please do not hesitate to contact me directly at (306) 519-1178 or Rui Li at (306) 535-5874.

Yours truly,

A handwritten signature in blue ink, appearing to read "Rynette Moore-Guillaume".

Rynette Moore-Guillaume
Senior Manager, Capital, Growth & Operations
EPCOR Water Services

City of Regina - Wastewater Treatment Plant

February 2024																			
Final Effluent Results											Permit# 00050853-08-00								
Date	Flow to Creek	Total Coliform	<i>E. coli</i>	Enterococci	Dissolved Oxygen (Field Test)	Temp. (Field Test)	pH (Field Test)	Chloride (Field Test)	Total Phosphorus	pH @15±1°C	Total Suspended Solids	CBOD	Ammonia Nitrogen	Unionized Ammonia @15±1°C	Total Kjeldahl Nitrogen	Total Nitrogen			
	(ML)	(MPN /100mL)			(mg/L)	(°C)	(SU)	(mg/L)	(mg P/L)	(SU)	(mg/L)	(mg/L)	(mg N/L)	(mg N/L)	(mg N/L)	(mg N/L)			
01	63.65	14	2		7.72	14.7	7.8	314	0.46	7.23	7.1	2.8	<	0.30	<	0.030	2.7	11.5	
02	63.46	64	6		7.72	14.6	7.6		0.55	7.30	9.8	2.9	<	0.30	<	0.030	2.5	12.0	
03	63.07				7.77	14.8	7.6		0.39		7.2	6.9	<	0.30			2.3	12.4	
04	68.51				7.98	14.8	7.9	248	0.59	7.26	12.8	3.6	<	0.39	<	0.030	3.2	10.9	
05	81.81	225	4		7.77	13.8	7.0	231	0.43	7.22	9.4	2.9	<	0.30	<	0.030	2.5	9.4	
06	64.13	46	2	1	7.75	14.0	7.4	218	0.27	7.10	5.7	<	2.0	<	0.30	<	0.030	2.5	10.6
07	62.27	26	1		7.69	14.4	7.7	229	0.22	7.15	4.8	<	2.0	<	0.30	<	0.030	2.2	11.8
08	61.72	28	3		7.92	14.5	7.6	232	0.23	7.14	6.1	<	2.0	<	0.30	<	0.030	2.3	10.9
09	61.02	41	<	1	7.74	14.5	7.8		0.28	7.20	5.1	2.1	<	0.30	<	0.030	2.2	11.3	
10	61.86				7.75	14.3	7.8		0.29		6.0	<	2.0	<	0.30		2.4	11.3	
11	63.42				7.82	14.3	7.4	233	0.27	7.23	6.6	2.0	<	0.30	<	0.030	1.9	10.3	
12	62.17	44	<	1	7.82	14.3	7.4	230	0.40	7.20	8.2	2.4	<	0.30	<	0.030	2.6	8.3	
13	59.18	49	2	4	7.90	14.0	7.4	249	0.38	7.28	7.8	2.4	<	0.30	<	0.030	2.5	8.4	
14	60.39	40	5		8.00	14.0	7.6	234	0.44	7.19	8.8	3.0	<	0.30	<	0.030	3.0	9.4	
15	61.09	50	6		8.05	14.0	7.2	224	0.48	7.22	9.4	3.3	<	0.44	<	0.030	3.1	9.7	
16	63.61	22	1		8.07	13.8	7.5		0.50	7.21	10.0	3.5	<	0.66	<	0.030	3.2	10.3	
17	61.40				7.64	13.9	7.8		0.30		9.8	2.8		1.63			4.3	10.5	
18	61.00				7.45	14.1	7.8	230	0.46	7.18	10.2	3.0		1.23	<	0.030	3.8	9.7	
19	61.00	155	12		7.71	14.2	7.3	218	0.48	7.23	8.6	3.4		1.37	<	0.030	3.8	9.1	
20	60.72	48	10	3	7.75	14.4	7.5	225	0.43	7.19	9.8	3.3	<	0.59	<	0.030	2.9	8.1	
21	59.99	921	49		7.59	14.6	7.7	221	0.42	7.21	10.6	2.9	<	0.30	<	0.030	2.6	8.6	
22	61.03	45	4		7.76	14.4	7.5	240	0.38	7.24	8.0	2.8	<	0.30	<	0.030	2.4	8.2	
23	60.93	86	1		7.07	14.4	7.8		0.37	7.30	8.0	2.5	<	0.30	<	0.030	2.6	7.5	
24	61.10				7.38	14.4	7.9		0.36		7.6	2.1		0.45			2.8	7.1	
25	64.00				7.67	14.5	7.8	188	0.43	7.24	9.8	2.3		0.98	<	0.030	3.7	8.0	
26	61.11	158	16		7.35	14.0	8.0	221	0.66	7.25	14.4	3.4		0.36	<	0.030	3.4	8.7	
27	60.01	53	2	4	7.38	13.8	8.0	232	0.52	7.29	11.2	3.6		0.78	<	0.030	3.4	9.4	
28	60.51	129	5		7.86	13.4	7.7	218	0.75	7.21	17.7	3.8		1.34	<	0.030	4.7	11.7	
29	61.51	67	2		7.57	13.4	7.6	209	0.58	7.30	12.6	3.6		1.39	<	0.030	4.4	10.8	
Sum	1815.67																		
Avg	62.61				7.71	14.2	7.6	231	0.42	7.22	9	3		0.57	<	0.030	3.0	10	
Min	59.18				7.07	13.4	7.0	188	0.22	7.10	4.8	<	2.0	<	0.30	<	0.030	1.9	7.1
Max	81.81		49		8.07	14.8	8.0	314	0.75	7.30	17.7	6.9		1.63	<	0.030	4.7	12.4	
Permit Limits			≤1,000						≤0.75		≤15	≤15		≤10		≤1.24		≤14	

E. coli Geometric Mean = 3 MPN/100mL, Limit = 200 MPN/100mL

Plant Notes:

Polymers and PAC were utilized from February 6th to 10th.

The swing zone was operated in a full-day anoxic condition starting from February 12th, contributing to the reduction in nitrate levels.

WSA Notes:

Feb 2, 3, 6-9 - CBOD results qualified. The quality control standard exceeded acceptance criterias.

Feb 20, 21 - CBOD results qualified. The blank exceeded acceptance criterias.

Creek Monthly Report to Water Security Agency

Tuesday, February 13, 2024

Permit# 00050853-08-00

Test Description	Riske's Crossing	Final Effluent	Sidmar Crossing	Wascana above the Qu'Appelle	Qu'Appelle above the Wascana	Lumsden
Dissolved Oxygen (Field Test)	6.64	7.90	8.82	9.53	9.35	9.51
pH (Field Test)	7.41	7.4	7.52	7.37	7.51	7.35
Temperature (Field Test)	1.6	14.0	4.9	1.6	0.1	0.6
pH at 15±1°C	7.37	7.28	7.21	7.31	7.61	7.39
Total Suspended Solids	27.6	7.8	19.6	4.5	5.5	6.3
Carbonaceous Biochemical Oxygen Demand	3.4	2.4	<2.0	<2.0	<2.0	<2.0
Total Phosphorus	0.64	0.38	0.29	0.22	<0.05	0.14
Total Kjeldahl Nitrogen	3.6	2.5	2.8	2.0	0.7	1.5
Ammonia Nitrogen	1.44	<0.30	0.78	<0.30	<0.30	<0.30
Un-ionized Ammonia	<0.030		<0.030	<0.030	<0.030	<0.030
Nitrate Nitrogen	0.24	5.86	4.97	5.54	<0.25	2.56
Total Nitrogen	3.8	8.4	8.0	7.6	0.8	4.1
Total Alkalinity	251	187	197	184	226	202
Carbonate	0	0	0	0	0	0
Bicarbonate	306	228	241	225	276	246
Chloride	320	249	231	254	27	166
Total Coliform	6,130	49	4,110	579	161	308
<i>E. coli</i>	687	2	1,120	34	4	46
Enterococci	228	4	649	517	1	104
Total Hardness*	343	333	340	324	287	304
Calcium*	70	79	77	74	64	69
Magnesium*	41	33	36	34	31	32
Potassium*	21	22	19	20	6.8	14
Sodium*	228	184	178	191	63	137
Sulfate*	200	240	240	220	160	200
Fluoride*	0.24	0.17	0.18			
Total Dissolved Solids*	1040	908	915	920	496	749
Conductivity at 25°C*	1790	1590	1560	1600	805	1280
Mercury*		0.000004				
Aluminum*		0.077				
Antimony*		0.0009				
Arsenic*		0.0012				
Barium*		0.044				
Beryllium*		<0.0001				
Boron*		0.28				
Cadmium*		0.00002				
Chromium*		<0.0005				
Cobalt*		0.0003				
Copper*		0.016				
Iron*		0.07				
Lead*		0.0010				
Manganese*		0.19				
Molybdenum*		0.0092				
Nickel*		0.0020				
Selenium*		0.0033				
Silver*		<0.00005				
Strontium*		0.45				
Thallium*		<0.0002				
Tin*		0.0005				
Titanium*		<0.0005				
Uranium*		0.0008				
Vanadium*		0.0005				
Zinc*		0.053				

Notes:

* Tests conducted by an external accredited laboratory.

Results are in mg/L except total coliforms, *E. coli*, enterococci (MPN/100mL), temperature (°C), conductivity (µS/cm) and pH (SU).