PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
February 2022

Digested Sludge: Total Monthly Volume (ML)	57.9

Volume of Flow (ML)

DATE	Peak Flow (ML/D)	Influent INFs	Influent RAW	Non UV Disinfected OUTFALL 30	Non UV Disinfected OUTFALL 20	Non UV Disinfected MPW	UV Disinfected EPEPS	UV Disinfected OUTFALL 10 FEC	UV Disinfected OUTFALL 10 FE
Tue-01	351.6	0.0	247.0	0.0	0.0	11.3	0.0	235.7	235.7
Wed-02	346.6	0.0	247.9	0.0	0.0	11.9	0.0	236.0	236.0
Thu-03	347.4	0.0	246.8	0.0	0.0	11.4	0.0	235.4	235.4
Fri-04	333.5	0.0	247.3	0.0	0.0	11.6	0.0	235.7	235.7
Sat-05	361.2	0.0	245.2	0.0	0.0	11.5	0.0	233.7	233.7
Sun-06	440.5	0.0	268.0	24.2	0.0	12.1	0.0	231.7	231.7
Mon-07	499.7	0.0	295.0	31.1	0.0	11.2	0.0	252.7	252.7
Tue-08	481.5	0.0	280.9	11.5	0.0	10.9	0.0	258.5	258.5
Wed-09	551.7	0.0	325.8	51.9	0.0	12.1	0.0	261.8	261.8
Thu-10	736.3	0.0	515.7	212.9	0.0	12.5	0.0	290.3	290.3
Fri-11	454.9	0.0	306.6	13.0	0.0	12.5	0.0	281.1	281.1
Sat-12	370.4	0.0	257.4	0.0	0.0	11.9	0.0	245.5	245.5
Sun-13	434.1	0.0	262.0	12.0	0.0	10.9	0.0	239.1	239.1
Mon-14	361.5	0.0	254.9	0.2	0.0	11.1	0.0	243.6	243.6
Tue-15	351.0	0.0	249.0	0.0	0.0	11.1	0.0	237.9	237.9
Wed-16	351.9	0.0	250.8	0.0	0.0	11.2	0.0	239.6	239.6
Thu-17	429.0	0.0	268.2	8.8	0.0	11.8	0.0	247.6	247.6
Fri-18	349.8	0.0	255.4	0.0	0.0	10.8	0.0	244.6	244.6
Sat-19	448.7	0.0	259.6	0.6	0.0	11.6	0.0	247.4	247.4
Sun-20	361.1	0.0	247.4	0.0	0.0	12.4	0.0	235.0	235.0
Mon-21	366.3	0.0	249.1	0.0	0.0	12.0	0.0	237.1	237.1
Tue-22	356.9	0.0	252.5	0.0	0.0	11.2	0.0	241.3	241.3
Wed-23	345.6	0.0	251.4	0.0	0.0	10.8	0.0	240.6	240.6
Thu-24	344.2	0.0	249.6	0.0	0.0	9.8	0.0	239.8	239.8
Fri-25	353.1	0.0	257.0	0.0	0.0	11.5	0.0	245.5	245.5
Sat-26	411.4	0.0	259.6	0.0	0.0	11.5	0.0	248.1	248.1
Sun-27	397.7	0.0	253.0	0.0	0.0	11.2	0.0	241.8	241.8
Mon-28	356.2	0.0	254.7	0.0	0.0	11.4	0.0	243.3	243.3
Average	403.4	0.0	269.9	13.1	0.0	11.5	0.0	245.4	245.4
Minimum	333.5	0.0	245.2	0.0	0.0	9.8	0.0	231.7	231.7
Maximum	736.3	0.0	515.7	212.9	0.0	12.5	0.0	290.3	290.3
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	7,558	366	0	321	0	6,870	6,870

Liquid Stream Quality

DATE	pH@25°C RAW	pH@25°C OUTFALL 30	pH@25°C OUTFALL 20	pH@25°C OUTFALL 30 FEC	TSS (mg/L) RAW	TSS (mg/L) OUTFALL 30	TSS (mg/L) OUTFALL 20	TSS (mg/L) EPEPS	TSS (mg/L) OUTFALL 30 FEC	TSS (mg/L) OUTFALL 30 FE
Tue-01	7.3			7.6	280				3.7	3.7
Wed-02	7.3			7.5	298				4.3	4.3
Thu-03	7.5			7.5	316				4.5	4.5
Fri-04	7.4			7.5	348				3.9	3.9
Sat-05	7.3			7.5	320				3.3	3.3
Sun-06	7.4	7.5		7.6	396	88			3.2	3.2
Mon-07	7.3	7.3		7.4	260	46			3.8	3.8
Tue-08	7.3	7.4		7.4	300	58			5.1	5.1
Wed-09	7.3	7.4		7.3	356	128			3.4	3.4
Thu-10	7.3	7.5		7.3	276	120			2.6	2.6
Fri-11	7.4	7.5		7.3	288	86			2.7	2.7
Sat-12	7.4			7.5	304				3.3	3.3
Sun-13	7.4	7.4		7.6	267	72			3.0	3.0
Mon-14	7.5	8.0		7.4	356	58			4.4	4.4
Tue-15	7.3			7.5	308				2.6	2.6
Wed-16	7.4			7.5	296				2.9	2.9
Thu-17	7.3	7.2		7.4	312	102			4.3	4.3
Fri-18	7.4			7.4	300				2.9	2.9
Sat-19	7.4	8.0		7.5	337	74			5.0	5.0
Sun-20	7.4			7.5	292				3.0	3.0
Mon-21	7.3			7.4	332				2.9	2.9
Tue-22	7.4			7.6	326				3.5	3.5
Wed-23	7.3			7.5	344				3.4	3.4
Thu-24	7.4			7.4	344				3.6	3.6
Fri-25	7.4			7.5	164				3.5	3.5
Sat-26	7.4			7.5	536				3.2	3.2
Sun-27	7.5			7.5	374				2.7	2.7
Mon-28	7.4			7.4	320				3.2	3.2
Average	7.4	7.5		7.5	320	83			3.5	3.5
Minimum	7.3	7.2	---	7.3	164	46	---	---	2.6	2.6
Maximum	7.5	8.0	---	7.6	536	128	---	---	5.1	5.1
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	$BOD_5/cBOD_5$ (mg/L) RAW	BOD_5 OUTFALL 30	BOD_5 OUTFALL 20	BOD_5 EPEPS	BOD_5 OUTFALL 30 FEC	BOD_5 OUTFALL 30 FE	TP (mg/L) RAW	TP (mg/L) OUTFALL 30	TP (mg/L) OUTFALL 20	TP (mg/L) EPEPS	TP (mg/L) OUTFALL 30 FEC	TP (mg/L) OUTFALL 30 FE
Tue-01	305				3	3	8.24				0.28	0.28
Wed-02	326				3	3	8.30				0.27	0.27
Thu-03	350				2	2	7.99				0.30	0.30
Fri-04	335				2	2	7.46				0.28	0.28
Sat-05	330				2	2	7.14				0.24	0.24
Sun-06	330	137			3	3	6.84	3.61			0.25	0.25
Mon-07	290	116			3	3	6.16	2.69			0.22	0.22
Tue-08	296	121			3	3	7.59	2.94			0.28	0.28
Wed-09	261	163			2	2	5.95	5.25			0.21	0.21
Thu-10	185	105			< 2	2	4.93	3.82			0.18	0.18
Fri-11	256	121			2	2	7.21	4.35			0.19	0.19
Sat-12	394				3	3	7.91				0.23	0.23
Sun-13	253	136			3	3	5.75	3.30			0.18	0.18
Mon-14	342	114			2	2	7.11	2.27			0.20	0.20
Tue-15	330				< 2	2	7.19				0.20	0.20
Wed-16	297				< 2	2	7.58				0.23	0.23
Thu-17	307	164			2	2	8.10	4.73			0.25	0.25
Fri-18	265				< 2	2	8.64				0.22	0.22
Sat-19	380	143			4	4	9.15	6.04			0.26	0.26
Sun-20	323				2	2	8.45				0.20	0.20
Mon-21	295				2	2	9.09				0.19	0.19
Tue-22	362				2	2	8.92				0.20	0.20
Wed-23	267				3	3	7.95				0.24	0.24
Thu-24	343				2	2	7.72				0.20	0.20
Fri-25	229				2	2	6.88				0.22	0.22
Sat-26	373				2	2	9.89				0.24	0.24
Sun-27	311				3	3	7.44				0.23	0.23
Mon-28	217				2	2	7.90				0.23	0.23
Average	305	132			2.4	2.4	7.62	3.90			0.23	0.23
Minimum	185	105	---	---	< 2	2	4.93	2.27	---	---	0.18	0.18
Maximum	394	164	---	---	4	4	9.89	6.04	---	---	0.30	0.30
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH3-N (mg/L) RAW	NH3-N (mg/L) OUTFALL 30	NH3-N (mg/L) OUTFALL 20	NH3-N (mg/L) EPEPS	NH3-N (mg/L) OUTFALL 30 FEC	NH3-N (mg/L) OUTFALL 30 FE	TKN (mg/L) RAW	TKN (mg/L) OUTFALL 30	TKN (mg/L) OUTFALL 20	TKN (mg/L) OUTFALL 30 FEC	NO_2+NO_3 (mg/L) RAW	NO_2+NO_3 (mg/L) OUTFALL 30	NO_2+NO_3 (mg/L) OUTFALL 20	NO_2+NO_3 (mg/L) OUTFALL 30 FEC	Chloride (mg/L) RAW	Chloride (mg/L) OUTFALL 30	Chloride (mg/L) OUTFALL 20	Chloride (mg/L) OUTFALL 30 FEC	*E. coli* (Counts/100 mL) RAW	*E. coli* OUTFALL 30	*E. coli* OUTFALL 20	*E. coli* OUTFALL 30 FEC
Tue-01	43.7				5.86	5.86	61.2			7.6				5.80	99.0			111				1
Wed-02	45.4				7.75	7.75	59.0			9.7	0.01			5.92	86.8			104				1
Thu-03	42.3				7.73	7.73	62.9			9.4				7.26	92.0			95				2
Fri-04	37.2				4.42	4.42	59.6			7.0				8.99	95.6			100				1
Sat-05	39.7				3.04	3.04	60.9			5.0				9.64	160			106				1
Sun-06	36.1	35.0			3.34	3.34	53.2	45.1		5.0		0.11		8.87	331	521		160		1.9		1
Mon-07	31.2	29.7			2.02	2.02	47.7	41.1		4.0		0.18		8.79	250	336		285		0.9		2
Tue-08	32.6	31.3			1.86	1.86	66.2	35.0		3.9		0.22		8.38	215	323		265	1.7	1.0		2
Wed-09	31.7	33.1			3.29	3.29	48.7	44.2		4.4	0.04	0.03		9.47	308	455		201		2.1		1
Thu-10	22.7	23.3			2.66	2.66	34.8	29.9		3.6		0.02		8.66	326	326		334		1.5		2
Fri-11	39.4	29.0			4.14	4.14	47.4	33.7		4.9		0.01		10.0	168	233		286		0.9		3
Sat-12	42.1				7.78	7.78	59.8			9.5				10.8	104			168				11
Sun-13	34.4	32.5			4.18	4.18	46.4	43.2		5.9		0.18		10.2	132	180		123		1.4		3
Mon-14	36.6	26.9			2.34	2.34	58.4	35.9		3.3		0.26		9.75	111			140		0.7		2
Tue-15	39.1				2.38	2.38	53.2			3.6				9.56	120			115				2
Wed-16	37.5				2.57	2.57	53.5			4.2	0.01			10.3	98			118	2.5			2
Thu-17	39.9	38.1			4.38	4.38	64.8	52.0		5.9		0.04		10.4	417	698		129		1.6		4
Fri-18	41.8				3.02	3.02	68.1			4.7				10.6	153			313				3
Sat-19	41.4	43.8			4.88	4.88	65.3	57.6		6.4		0.21		10.9	218	355		184		3.7		2
Sun-20	45.1				3.99	3.99	63.5			5.9				11.1	92.2			203				5
Mon-21	45.5				5.33	5.33	69.1			6.4				11.0	299			122				2
Tue-22	36.7				4.66	4.66	67.4			6.0				10.3	94			99				1
Wed-23	45.4				2.29	2.29	63.2			4.8	< 0.01			10.8	170			100				3
Thu-24	40.3				2.83	2.83	61.2			4.1				11.4	107			98				7
Fri-25	43.0				3.06	3.06	54.3			4.5				11.1	162			118				2
Sat-26	43.8				3.58	3.58	64.2			4.7				10.3	214			159				2
Sun-27	43.9				2.37	2.37	61.0			4.8				11.0	114			199				4
Mon-28	37.7				3.30	3.30	64.6			4.5				11.5	104			137				2
Average	39.2	32.3			3.89	3.89	58.6	41.8		5.5	0.02	0.13		9.74	173	381		163				
Minimum	22.7	23.3	---	---	1.86	1.86	34.8	29.9	---	3.3	< 0.01	0.01	---	5.80	87	180	---	95	1.7	0.7	---	1
Maximum	45.5	43.8	---	---	7.78	7.78	69.1	57.6	---	9.7	0.04	0.26	---	11.5	417	698	---	334	2.5	3.7	---	11
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2.1	1.4	---	2
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

* Contact Laboratory for information about the quality assurance associated with the results

Enhanced Primary Treatment (EPT) Usage

Total Bypass (hr)	EPT Usage (hr)	% Usage	Total Bypass YTD (hr)	EPT Usage YTD (hr)	% Usage YTD
75	75	100%	99	99	100%

Report Comments

AEP Ref #

RAW	Untreated Influent into the plant
INF	Untreated wastewater from collection system
INFs	Influent, screened at the Headworks Diversion Structure
PE	Primary Effluent from conventional primaries
PE 30	Primary Effluent from conventional primaries discharged via Outfall 30
EPT	Enhanced Primary Treatment
EPE	Enhanced Primary Effluent
EPEPS	Enhanced Primary Effluent Pump Station
FE	Final Effluent from secondary treatment process (with biological nutrient removal). Pre-Ultraviolet disinfection.
FEC	Combined post-UV disinfection (FE+EPEPS)
OUTFALL 10	UV-disinfected, discharged via OUTFALL 10
OUTFALL 20	Combined Bypass (RAW + PE + EPE)
OUTFALL 30	Combined Bypass (INF + INFS + PE30 + EPE)
MPW	Membrane Product Water (Effluent re-use water)
ML	Megalitre (1,000,000 Litre)
MPN	Most Probable Number
NR	No Result
NS	No Sample
INS	Insufficient Sample
'	Alberta Environment & Parks

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