PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
January 2023

Digested Sludge: Total Monthly Volume (ML)	66.9

Volume of Flow (ML)

DATE	Peak Flow (ML/d)	Influent	Effluent						
			Non UV Disinfected			UV Disinfected			
		INFs	RAW	OUTFALL 30	OUTFALL 20	MPW	EPBPS	OUTFALL 10 FEC	OUTFALL 10 FE
Sun-01	334.9	0.0	354.6	0.0	0.0	12.4	0.0	242.2	242.2
Mon-02	342.2	0.0	353.4	0.0	0.0	12.3	0.0	251.1	251.1
Tue-03	317.3	0.0	269.9	0.0	0.0	12.3	0.0	257.6	257.6
Wed-04	326.6	0.0	267.6	0.0	0.0	12.4	0.0	255.2	255.2
Thu-05	322.3	0.0	266.6	0.0	0.0	12.6	0.0	254.0	254.0
Fri-06	336.1	0.0	266.8	0.0	0.0	12.0	0.0	254.8	254.8
Sat-07	325.8	0.0	263.5	0.0	0.0	11.5	0.0	252.0	252.0
Sun-08	357.0	0.0	266.1	0.0	0.0	10.8	0.0	255.3	255.3
Mon-09	333.5	0.0	271.9	0.0	0.0	10.8	0.0	261.1	261.1
Tue-10	330.5	0.0	263.4	0.0	0.0	10.4	0.0	253.0	253.0
Wed-11	332.5	0.0	267.9	0.0	0.0	11.7	0.0	256.2	256.2
Thu-12	328.2	0.0	266.0	0.0	0.0	12.1	0.0	253.9	253.9
Fri-13	327.5	0.0	267.5	0.0	0.0	10.8	0.0	256.7	256.7
Sat-14	338.2	0.0	268.1	0.0	0.0	10.4	0.0	257.7	257.7
Sun-15	342.4	0.0	265.9	0.0	0.0	11.7	0.0	254.2	254.2
Mon-16	331.9	0.0	267.9	0.0	0.0	11.7	0.0	256.2	256.2
Tue-17	330.7	0.0	263.4	0.0	0.0	11.3	0.0	252.1	252.1
Wed-18	327.2	0.0	266.3	0.0	0.0	10.6	0.0	255.7	255.7
Thu-19	326.9	0.0	264.6	0.0	0.0	11.4	0.0	253.2	253.2
Fri-20	332.3	0.0	266.1	0.0	0.0	11.8	0.0	254.3	254.3
Sat-21	402.1	0.0	275.8	0.0	0.0	11.2	0.0	264.6	264.6
Sun-22	415.5	0.0	285.6	0.0	0.0	11.8	0.0	273.8	273.8
Mon-23	328.7	0.0	269.7	0.0	0.0	12.0	0.0	257.7	257.7
Tue-24	322.5	0.0	266.8	0.0	0.0	12.0	0.0	254.8	254.8
Wed-25	351.7	0.0	268.9	0.0	0.0	11.7	0.0	257.2	257.2
Thu-26	570.3	0.0	368.1	55.9	0.0	11.6	0.0	300.6	300.6
Fri-27	401.8	0.0	389.8	3.0	0.0	11.2	0.0	275.6	275.6
Sat-28	444.2	0.0	266.6	0.0	0.0	11.7	0.0	254.9	254.9
Sun-29	330.0	0.0	267.7	0.0	0.0	9.7	0.0	258.0	258.0
Mon-30	340.5	0.0	271.4	0.0	0.0	10.4	0.0	261.0	261.0
Tue-31	353.1	0.0	265.9	0.0	0.0	11.0	0.0	254.9	254.9
Average	353.0	0.0	271.4	1.9	0.0	11.5	0.0	258.1	258.1
Minimum	317.3	0.0	354.6	0.0	0.0	9.7	0.0	242.2	242.2
Maximum	570.3	0.0	368.1	55.9	0.0	12.6	0.0	300.6	300.6
Geo/Mean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	8,414	59	0	355	0	8,000	8,000

Liquid Stream Quality

DATE	pH@25°C				TSS (mg/L)					BOD$_5$/cBOD$_5$ (mg/L)						TP (mg/L)					NH3-N (mg/L)					un-Ionized NH3-N (mg/L)			TKN (mg/L)				NO$_3$+NO$_2$ (mg/L)				Chloride (mg/L)				E. coli (Counts/100 mL)			
	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	RAW	OUTFALL 30	OUTFALL 20	EPBPS	OUTFALL 10 FEC	OUTFALL 10 FE	RAW	OUTFALL 30 BOD$_5$	OUTFALL 20 BOD$_5$	EPBPS BOD$_5$	OUTFALL 10 FEC cBOD$_5$	OUTFALL 10 FE cBOD$_5$	RAW	OUTFALL 30	OUTFALL 20	EPBPS	OUTFALL 10 FEC	OUTFALL 10 FE	RAW	OUTFALL 30	OUTFALL 20	EPBPS	OUTFALL 10 FEC	OUTFALL 10 FE	OUTFALL 30	OUTFALL 20	OUTFALL 10	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC
Sun-01	7.6			7.6	428				2.5	2.5	337				2	2	7.02				0.20	0.20	39.2				2.94	2.94				56.1			4.2				9.23	99.2			131				2
Mon-02	7.6			7.6	403				2.7	2.7	363				3	3	6.61				0.21	0.21	33.2				2.36	2.36				56.1			3.7				10.5	104			115				5
Tue-03	7.7			7.6	400				2.7	2.7	376				3	3	6.73				0.22	0.22	31.0				2.31	2.31				57.0			3.8				9.46	114			116				6
Wed-04	7.6			7.5	397				2.6	2.6	331				2	2	7.03				0.25	0.25	28.9				1.58	1.58				55.3		< 0.01	2.9				8.99	111			122				3
Thu-05	7.5			7.6	443				3.3	3.3	406				3	3	7.71				0.25	0.25	36.5				1.39	1.39				66.8			3.1				8.76	105			129				2
Fri-06	7.5			7.5	428				3.2	3.2	384				2	2	7.71				0.25	0.25	40.6				1.16	1.16				64.0			2.6				10.9	109			134				2
Sat-07	7.7			7.5	420				2.1	2.1	380				3	3	7.74				0.25	0.25	40.6				1.07	1.07				58.5			2.7				10.9	111			128				1
Sun-08	7.6			7.7	432				3.0	3.0	389				3	3	8.20				0.23	0.23	36.8				1.21	1.21				61.2			3.1				11.0	105			116				2
Mon-09	7.6			7.5	427				3.6	3.6	316				2	2	7.48				0.23	0.23	27.7				1.16	1.16				56.6			2.7				10.5	120			109				1
Tue-10	7.6			7.5	424				3.0	3.0	338				3	3	8.24				0.25	0.25	35.4				0.53	0.53				64.0			2.1				10.9	122			126				3
Wed-11	7.6			7.6	452				3.0	3.0	319				< 2	< 2	8.02				0.28	0.28	34.9				0.73	0.73				61.6		< 0.01	2.5				9.86	119			126				1
Thu-12	7.6			7.5	472				4.6	4.6	351				2	2	8.17				0.28	0.28	35.2				0.67	0.67				61.9			2.4				9.65	122			130				2
Fri-13	7.6			7.4	397				3.4	3.4	313				2	2	9.38				0.26	0.26	34.0				0.66	0.66				61.1			2.4				10.6	107			124				3
Sat-14	7.6			7.5	480				4.0	4.0	293				2	2	8.74				0.26	0.26	28.6				0.82	0.82				63.4			2.5				10.4	102			119				3
Sun-15	7.5			7.6	420				2.7	2.7	312				2	2	8.47				0.30	0.30	31.0				1.10	1.10				66.2			3.6				9.54	101			107				7
Mon-16	7.6			7.5	412				3.0	3.0	375				2	2	7.59				0.24	0.24	33.3				1.21	1.21				61.0			2.8				7.89	111			103				6
Tue-17	7.6			7.6	400				2.1	2.1	312				2	2	7.57				0.23	0.23	36.3				0.57	0.57				58.7			2.4				8.71	122			139	1.6			8
Wed-18	7.5			7.5	420				1.8	1.8	328				2	2	8.20				0.23	0.23	33.0				0.80	0.80				61.5		< 0.01	2.4				9.77	110			123				3
Thu-19	7.5			7.6	363				3.4	3.4	384				2	2	8.47				0.27	0.27	41.8				1.35	1.35				67.8			2.8				9.12	103			117				6
Fri-20	7.5			7.6	324				2.4	2.4	348				2	2	7.93				0.26	0.26	42.9				1.75	1.75				64.2			3.5				8.70	110			116				3
Sat-21	7.4			7.7	332				2.2	2.2	307				2	2	7.82				0.29	0.29	44.6				2.36	2.36				64.6			4.2				8.48	143			127				2
Sun-22	7.5			7.6	338				2.4	2.4	302				2	2	7.59				0.24	0.24	41.1				2.94	2.94				64.4			4.8				7.87	142			173				8
Mon-23	7.5			7.5	332				2.8	2.8	333				3	3	7.42				0.23	0.23	42.9				2.30	2.30				60.2			3.8				7.84	105			152				4
Tue-24	7.7			7.6	356				2.4	2.4	359				2	2	7.35				0.30	0.30	39.4				1.73	1.73				57.9			3.6				7.53	156			139				5
Wed-25	7.5			7.6	338				2.2	2.2	373				2	2	6.86				0.23	0.23	40.5				1.68	1.68				57.6		0.01	3.3				8.53	121			156				3
Thu-26	7.3	7.3		7.5	408	168			2.8	2.8	321	144			2	2	5.97	4.10			0.21	0.21	24.4	28.5			1.17	1.17				44.0	44.5		3.0		0.31		7.03	409	561		223		1.1		4
Fri-27	7.5	7.7		7.4	304	106			2.1	2.1	324	141			2	2	7.16	1.80			0.21	0.21	37.5	29.2			1.02	1.02				57.8	21.8		2.4		0.11		6.48	193	376		347	2.4	0.7		6
Sat-28	7.6			7.5	328				2.5	2.5	319				2	2	7.17				0.20	0.20	44.7				2.10	2.10				61.2			3.9				7.30	105			166				2
Sun-29	7.5			7.8	364				2.1	2.1	293				2	2	7.97				0.19	0.19	35.7				2.40	2.40				68.8			4.4				8.90	84.4			125				4
Mon-30	7.5			7.5	373				3.0	3.0	361				3	3	7.74				0.20	0.20	30.9				2.37	2.37				68.8			4.2				7.85	97.1			102				5
Tue-31	7.7			7.6	420				2.3	2.3	355				2	2	7.80				0.19	0.19	33.3				1.35	1.35				62.6			3.1				8.85	118			110				2
Average	7.6	7.5	---	7.5	394	137	---	---	2.8	2.8	342	143	---	---	2.3	2.3	7.87	2.95	---	---	0.24	0.24	36.3	28.9	---	---	1.51	1.51	---	---	---	61.0	33.2	---	3.2	< 0.01	0.21	---	9.10	125	469	---	170	---	---	---	---
Minimum	7.3	7.3	---	7.4	304	106	---	---	1.8	1.8	293	141	---	---	< 2	2	5.97	1.80	---	---	0.19	0.19	24.4	28.5	---	---	0.53	0.53	---	---	---	44.0	21.8	---	2.1	< 0.01	0.11	---	6.48	84.4	376	---	102	1.6	0.7	---	1
Maximum	7.7	7.7	---	7.8	480	168	---	---	4.6	4.6	406	144	---	---	3	3	9.38	4.10	---	---	0.30	0.30	44.7	29.2	---	---	2.94	2.94	---	---	---	68.8	44.5	---	4.8	0.01	0.31	---	11.0	409	561	---	347	2.4	1.1	---	8
Geo/Mean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
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
12	12	100%	12	12	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
AEP	Alberta Environment & Parks

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