PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
June 2017

Digested Sludge: Total Monthly Volume (ML)	62.86

DATE	Peak Flow (MLD)	Volume of Flow (ML)							pH@25°C				TSS (mg/L)						BOD$_5$/cBOD$_5$ (mg/L)						TP (mg/L)						NH3-N (mg/L)						TKN (mg/L)				NO$_2$+NO$_3$ (mg/L)				Chloride (mg/L)				*E. coli* (Counts/100 mL)				
		Influent	Effluent																																																			
			Non UV Disinfected			UV Disinfected																																																	
							OUTFALL 10																OUTFALL 10										OUTFALL 10										OUTFALL 10									
																							FEC	FE																														
		RAW	OUTFALL 30	OUTFALL 20	MPW	EPEPS	FEC	FE	RAW	OUTFALL 30	OUTFALL 20	FEC	RAW	OUTFALL 30	OUTFALL 20	EPEPS	FEC	FE	RAW	OUTFALL 30	OUTFALL 20	EPEPS	cBOD$_5$	cBOD$_5$	RAW	OUTFALL 30	OUTFALL 20	EPEPS	FEC	FE	RAW	OUTFALL 30	OUTFALL 20	EPEPS	FEC	FE	RAW	OUTFALL 30	OUTFALL 20	FEC	RAW	OUTFALL 30	OUTFALL 20	FEC	RAW	OUTFALL 30	OUTFALL 20	FEC	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10
DATE																			BOD$_5$	BOD$_5$	BOD$_5$	BOD$_5$																																		
Thu 01	464.25	304.50	0.00	0.00	10.21	0.00	294.29	294.29	7.7			7.4	373				8.7	8.7	241				4	4	8.89				0.61	0.61	35.3				0.901	0.901	64.4			3.08				13.5	87.1			90.6				17
Fri 02	669.01	378.17	56.29	0.00	11.29	0.00	310.59	310.59	7.6	7.8		7.5	324	65.5			13.1	13.1	194	118			5	5	7.53	4.29			0.49	0.49	31.0	31.0			0.575	0.575	52.5	40.4		2.83		0.46		13.4	78.5	75.0		88.6		1.0		11
Sat 03	383.77	286.19	0.00	0.00	10.60	0.00	275.59	275.59	7.6			7.6	318				10.0	10.0	294				5	5	8.16				0.40	0.40	39.2				0.646	0.646	58.7			2.78				13.9	88.4			83.6				13
Sun 04	393.45	278.89	0.00	0.00	11.36	0.00	267.53	267.53	7.7			7.5	260				10.2	10.2	265				4	4	8.44				0.45	0.45	37.4				0.948	0.948	61.3			3.38				15.0	90.8			85.1				26
Mon 05	410.45	311.16	0.00	0.00	10.87	0.00	300.29	300.29	7.6			7.6	344				13.2	13.2	251				5	5	7.77				0.58	0.58	35.2				1.30	1.30	55.2			3.58				12.6	87.8			88.2				16
Tue 06	364.11	285.33	0.00	0.00	10.37	0.00	274.96	274.96	7.7			7.6	263				9.8	9.8	238				4	4	7.47				0.40	0.40	38.9				2.03	2.03	54.8			3.97				10.1	86.3			92.4				15
Wed 07	376.98	281.39	0.00	0.00	10.61	0.00	270.78	270.78	7.7			7.5	328				10.4	10.4	239				4	4	7.64				0.39	0.39	33.8				1.37	1.37	53.8			3.60	< 0.01			10.6	88.2			90.6				16
Thu 08	373.77	282.79	0.00	0.00	11.14	0.00	271.65	271.65	7.7			7.6	324				9.5	9.5	242				4	4	8.48				0.35	0.35	37.3				0.977	0.977	61.8			2.84				9.80	88.5			93.4				4
Fri 09	583.54	327.83	32.58	0.00	9.73	0.00	285.52	285.52	7.7	7.7		7.7	372	89.0			9.3	9.3	326	128			4	4	7.93	4.87			0.42	0.42	35.9	31.5			1.15	1.15	58.3	46.5		3.46		0.160		11.3	87.0	92.7		91.2		0.9		13
Sat 10	577.16	356.88	34.36	0.00	10.17	0.00	312.35	312.35	7.7	7.6		7.5	258	49.2			10.4	10.4	208	81			3	3	6.96	3.49			0.33	0.33	30.8	27.3			0.801	0.801	46.5	33.8		2.94		<0.15		9.18	64.6	61.4		81.1		1.2		9
Sun 11	372.79	279.44	0.00	0.00	10.48	0.00	268.96	268.96	7.7			7.5	286				6.9	6.9	275				4	4	7.87				0.29	0.29	38.4				1.16	1.16	60.4			2.98				11.0	81.1			79.9				15
Mon 12	357.22	281.57	0.00	0.00	9.49	0.00	272.08	272.08	7.5			7.2	309				8.8	8.8	292				4	4	8.55				0.35	0.35	39.0				0.901	0.901	60.5			3.18				10.8	93.2			88.6				24
Tue 13	364.18	279.07	0.00	0.00	9.06	0.00	270.01	270.01	7.7			7.6	340				8.9	8.9	290				3	3	7.53				0.32	0.32	32.3				0.324	0.324	51.1			2.13				8.94	85.8			88.5				5
Wed 14	796.34	352.64	63.49	0.00	9.77	0.00	279.38	279.38	7.7	7.7		7.5	424	52.0			8.7	8.7	268	93			4	4	6.76	3.70			0.36	0.36	30.8	33.6			0.392	0.392	47.8	38.6		2.34	< 0.01	0.240		8.03	68.5	63.9		89.0		2.4		10
Thu 15	417.14	303.13	3.95	0.00	10.32	0.00	288.86	288.86	7.7			7.6	266				7.6	7.6	234				4	4	7.25				0.36	0.36	34.6				0.526	0.526	53.8			2.82				8.65	79.6			75.0		1.2		14
Fri 16	595.33	307.06	14.23	0.00	10.36	0.00	282.47	282.47	7.7	7.8		7.5	360	74.0			6.9	6.9	253	138			4	4	7.76	6.28			0.35	0.35	35.2	41.0			1.20	1.20	56.9	58.0		3.69		0.048		11.8	88.6	89.4		86.3		0.9		10
Sat 17	396.63	278.24	0.46	0.00	10.19	0.00	267.59	267.59	7.7			7.5	320				5.7	5.7	322				4	4	7.79				0.27	0.27	40.4				1.16	1.16	59.6			3.06				10.4	79.7			86.9		1.8		7
Sun 18	370.69	266.54	0.00	0.00	10.74	0.00	255.80	255.80	7.7			7.5	287				9.0	9.0	243				4	4	7.46				0.29	0.29	36.5				0.872	0.872	58.5			3.03				11.5	81.8			84.3				5
Mon 19	364.33	275.86	0.00	0.00	9.87	0.00	265.99	265.99	7.7			7.6	332				7.4	7.4	275				4	4	7.64				0.30	0.30	42.4				0.783	0.783	56.0			2.68				11.8	93.1			86.1				9
Tue 20	747.98	340.77	38.86	0.00	9.71	0.00	292.20	292.20	7.4	7.5		7.5	333	47.4			6.2	6.2	210	108			3	3	6.45	3.76			0.36	0.36	26.0	26.0			0.264	0.264	41.6	33.5		2.36		0.353		8.58	70.8	61.9		90.5		2.1		10
Wed 21	468.81	302.05	8.44	0.00	9.87	0.00	283.74	283.74	7.6	7.8		7.5	270	38.4			6.3	6.3	222	63			3	3	7.22	3.44			0.30	0.30	33.9	23.9			0.158	0.158	49.5	31.3		1.86	< 0.01	1.77		8.25	75.9	56.1		75.9		0.6		7
Thu 22	370.21	290.89	0.00	0.00	10.06	0.00	280.83	280.83	7.6			7.5	268				6.2	6.2	243				3	3	8.00				0.31	0.31	38.2				0.307	0.307	55.4			2.25				11.7	81.9			82.0				7
Fri 23	358.05	273.65	0.00	0.00	10.04	0.00	263.61	263.61	7.7			7.6	303				6.0	6.0	280				3	3	8.40				0.28	0.28	40.3				0.517	0.517	57.2			2.30				12.0	85.2			86.4				8
Sat 24	358.64	259.46	0.00	0.00	10.93	0.00	248.53	248.53	7.7			7.6	283				5.8	5.8	308				3	3	7.74				0.27	0.27	38.1				0.384	0.384	54.6			2.19				12.9	70.7			89.5				10
Sun 25	356.94	261.71	0.00	0.00	10.88	0.00	250.83	250.83	7.6			7.6	293				5.9	5.9	279				3	3	9.23				0.26	0.26	39.0				0.367	0.367	65.1			2.04				8.46	76.2			81.8				2
Mon 26	366.88	277.04	0.00	0.00	11.30	0.00	265.74	265.74	7.6			7.6	268				9.8	9.8	240				4	4	8.40				0.36	0.36	37.3				0.226	0.226	58.8			2.04				10.8	76.1			84.1				8
Tue 27	546.56	331.13	24.54	0.00	10.80	0.00	295.79	295.79	7.6	7.8		7.6	500	78.0			8.2	8.2	269	136			3	3	7.80	5.98			0.31	0.31	30.8	34.2			0.795	0.795	48.6	48.9		2.37		3.20		6.82	67.1	71.4		83.9	3.4	2.1		14
Wed 28	897.34	375.95	73.14	0.00	10.89	0.00	291.92	291.92	7.5	7.5		7.4	368	70.7			8.3	8.3	221	79			4	4	7.21	3.66			0.43	0.43	24.7	22.5			0.623	0.623	43.1	32.3		2.78	< 0.01	0.149		9.24	63.1	55.6		76.4		1.2		15
Thu 29	406.76	287.14	0.00	0.00	11.12	0.00	276.02	276.02	7.7	8.2		7.5	286	18.6			6.8	6.8	263	90			3	3	8.61	3.72			0.28	0.28	31.9	30.6			0.513	0.513	54.2	37.8		2.12		0.247		7.22	71.4			70.3	2.3	0.6		15
Fri 30	367.54	277.80	0.00	0.00	11.65	0.00	266.15	266.15	7.6			7.5	240				5.6	5.6	311				3	3	8.15				0.28	0.28	36.8				0.669	0.669	53.8			2.44				9.81	79.2			86.6				15
Average	462.56	299.81	11.68	0.00	10.46	0.00	277.67	277.67	7.6	7.7	---	7.5	317	58.3	---	---	8.3	8.3	260	103	---	---	3.7	3.7	7.84	4.32	---	---	0.36	0.36	35.4	30.2	---	---	0.761	0.761	55.1	40.1	---	2.77	< 0.01	0.74	---	10.6	80.5	69.7	---	85.2	---	---	---	---
Minimum	356.94	259.46	0.00	0.00	9.06	0.00	248.53	248.53	7.4	7.5	---	7.2	240	18.6	---	---	5.6	5.6	194	63	---	---	3	3	6.45	3.44	---	---	0.26	0.26	24.7	22.5	---	---	0.158	0.158	41.6	31.3	---	1.86	< 0.01	0.05	---	6.82	63.1	55.6	---	70.3	2.3	0.6	---	2
Maximum	897.34	378.17	73.14	0.00	11.65	0.00	312.35	312.35	7.7	8.2	---	7.7	500	89.0	---	---	13.2	13.2	326	138	---	---	5	5	9.23	6.28	---	---	0.61	0.61	42.4	41.0	---	---	2.03	2.03	65.1	58.0	---	3.97	0.01	3.20	---	15.0	93.2	92.7	---	93.4	3.4	2.4	---	26
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	8,994	350	0	314	0	8,330	8,330	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

* contact Laboratory for information about the quality assurance associated with the result

Enhanced Primary Treatment (EPT) Usage					
Total Bypass (hrs)	EPT Usage (hrs)		Total Bypass YTD (hrs)	EPT Usage YTD	% Usage YTD
40	40	100%	352	352	100.00%

Report Comments

1	Outfall 30 - June 29: Final TSS residue less than that recommended by Standard Methods to provide a suitable recovery. Not sample to repeat analysis.
2	Raw - June 12: Recommended holding time for BOD was exceeded prior to analysis by 132 hours.

AEP Ref #**

** AEP - Alberta Environment & Parks

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 and Pump Station
FE	Final Effluent from secondary treatment process (with biological nutrient removal). Pre-

FEC	Combined pre-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

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