PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
April 2018

Digested Sludge: Total Monthly Volume (ML)	67.63

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent RAW	Effluent Non UV Disinfected OUTFALL 30	OUTFALL 20	MPW	OUTFALL 20	Effluent UV Disinfected EPEPS	OUTFALL 10 FEC	OUTFALL 10 FE
Sun 01	320.91	241.15	0.00	0.00	8.37	0.00	0.00	232.78	232.78
Mon 02	389.52	255.68	0.00	0.00	8.56	0.00	0.00	247.12	247.12
Tue 03	388.37	262.24	0.00	0.00	8.55	0.00	0.00	253.69	253.69
Wed 04	320.75	248.62	0.00	0.00	7.32	0.00	0.00	241.30	241.30
Thu 05	319.67	247.56	0.00	0.00	8.86	0.00	0.00	238.70	238.70
Fri 06	319.82	247.38	0.00	0.00	8.58	0.00	0.00	238.80	238.80
Sat 07	326.14	244.29	0.00	0.00	8.28	0.00	0.00	236.01	236.01
Sun 08	377.47	251.15	0.00	0.00	7.50	0.00	0.00	243.65	243.65
Mon 09	403.35	266.07	0.00	0.00	3.65	0.00	0.00	262.42	262.42
Tue 10	600.29	347.62	62.02	0.00	2.79	0.00	0.00	282.81	282.81
Wed 11	387.61	294.32	3.79	0.00	2.72	0.00	0.00	287.81	287.81
Thu 12	365.39	265.18	0.00	0.00	0.12	0.00	0.00	265.06	265.06
Fri 13	685.93	320.59	43.75	0.00	0.00	0.00	0.00	276.84	276.84
Sat 14	789.71	381.13	88.78	0.00	0.00	0.00	0.00	292.35	292.35
Sun 15	641.44	374.87	74.78	0.00	0.00	0.00	0.00	300.09	300.09
Mon 16	552.86	343.36	26.42	0.00	0.00	0.00	0.00	316.94	316.94
Tue 17	1,063.42	496.07	175.36	0.00	0.00	0.00	0.00	320.71	320.71
Wed 18	583.34	382.32	67.18	0.00	0.00	0.00	0.00	315.14	315.14
Thu 19	462.25	333.61	30.45	0.00	0.00	0.00	0.00	303.16	303.16
Fri 20	430.85	307.04	4.98	0.00	0.00	0.00	0.00	302.06	302.06
Sat 21	610.16	319.28	35.30	0.00	0.00	0.00	0.00	283.98	283.98
Sun 22	404.12	290.50	1.20	0.00	0.00	0.00	0.00	289.30	289.30
Mon 23	368.91	278.68	0.00	0.00	0.00	0.00	0.00	278.68	278.68
Tue 24	347.37	260.23	0.00	0.00	0.00	0.00	0.00	260.23	260.23
Wed 25	345.84	259.98	0.00	0.00	0.00	0.00	0.00	259.98	259.98
Thu 26	348.23	262.60	0.00	0.00	0.00	0.00	0.00	262.60	262.60
Fri 27	354.04	262.40	0.00	0.00	0.50	0.00	0.00	261.90	261.90
Sat 28	373.75	258.14	0.00	0.00	3.96	0.00	0.00	254.18	254.18
Sun 29	359.26	257.19	0.00	0.00	3.08	0.00	0.00	254.11	254.11
Mon 30	346.77	256.80	0.00	0.00	4.52	0.00	0.00	252.28	252.28
Average	452.92	293.87	20.47	0.00	2.91	0.00	0.00	270.49	270.49
Minimum	319.67	241.15	0.00	0.00	0.00	0.00	0.00	232.78	232.78
Maximum	1,063.42	496.07	175.36	0.00	8.86	0.00	0.00	320.71	320.71
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	8,816	614	0	87	0.00	0	8,115	8,115

Liquid Stream Quality

DATE	pH@25°C RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	TSS (mg/L) RAW	OUTFALL 30	OUTFALL 20	EPEPS	OUTFALL 10 FEC	OUTFALL 10 FE
Sun 01	7.6			7.3	388				5.9	5.9
Mon 02	7.7			7.3	328				5.6	5.6
Tue 03	7.6			7.3	312				6.8	6.8
Wed 04	7.5			7.2	564				5.4	5.4
Thu 05	7.6			7.3	297				5.7	5.7
Fri 06	7.6			7.4	368				6.4	6.4
Sat 07	7.6			7.2	306				6.5	6.5
Sun 08	7.7			7.3	320				11.1	11.1
Mon 09	7.6			7.3	396				16.0	16.0
Tue 10	7.5	7.4		7.2	392	93			18.0	18.0
Wed 11	7.6	7.4		7.2	272	49			72.0	72.0
Thu 12	7.7			7.3	282				8.8	8.8
Fri 13	7.7	7.5		7.3	388	108			7.2	7.2
Sat 14	7.6	7.5		7.3	257	82			5.3	5.3
Sun 15	7.5	7.4		7.2	216	57			4.2	4.2
Mon 16	7.5	7.4		7.2	376	55			5.3	5.3
Tue 17	7.5	7.4		7.2	644	139			5.5	5.5
Wed 18	7.5	7.5		7.2	304	78			5.5	5.5
Thu 19	7.5	7.4		7.2	320	59			5.9	5.9
Fri 20	7.6	7.7		7.3	232	54			6.2	6.2
Sat 21	7.5	7.3		7.2	326	61			4.0	4.0
Sun 22	7.5	7.9		7.3	286	42			5.2	5.2
Mon 23	7.7			7.3	448				8.0	8.0
Tue 24	7.7			7.2	304				7.4	7.4
Wed 25	7.6			7.3	312				8.1	8.1
Thu 26	7.5			7.4	291				10.1	10.1
Fri 27	7.6			7.3	268				7.8	7.8
Sat 28	7.6			7.3	300				8.6	8.6
Sun 29	7.6			7.3	276				10.2	10.2
Mon 30	7.6			7.3	292				7.7	7.7
Average	7.6	7.5	---	7.3	336	73	---	---	9.7	9.7
Minimum	7.5	7.3	---	7.2	216	42	---	---	4.0	4.0
Maximum	7.7	7.9	---	7.4	644	139	---	---	72.0	72.0
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	BOD5/cBOD5 (mg/L) RAW BOD5	OUTFALL 30 BOD5	OUTFALL 20 BOD5	EPEPS BOD5	OUTFALL 10 FEC cBOD5	OUTFALL 10 FE cBOD5	TP (mg/L) RAW	OUTFALL 30	OUTFALL 20	EPEPS	OUTFALL 10 FEC	OUTFALL 10 FE
Sun 01	284				4	4	6.18				0.20	0.20
Mon 02	354				4	4	6.63				0.21	0.21
Tue 03	318				3	3	6.70				0.27	0.27
Wed 04	415				3	3	5.53				0.27	0.27
Thu 05	382				4	4	7.15				0.26	0.26
Fri 06	392				3	3	7.28				0.30	0.30
Sat 07	239				4	4	7.25				0.36	0.36
Sun 08	350				5	5	7.74				0.45	0.45
Mon 09	344				5	5	8.58				0.59	0.59
Tue 10	271	136			6	6	6.92	4.74			0.69	0.69
Wed 11	246	116			14	14	7.42	4.04			2.21	2.21
Thu 12	281				4	4	7.66				0.38	0.38
Fri 13	328	129			4	4	6.48	4.34			0.42	0.42
Sat 14	216	124			3	3	5.09	4.55			0.34	0.34
Sun 15	204	124			3	3	5.24	3.90			0.26	0.26
Mon 16	274	110			3	3	5.72	4.10			0.30	0.30
Tue 17	201	108			2	2	4.94	3.79			0.37	0.37
Wed 18	228	134			3	3	5.18	4.11			0.26	0.26
Thu 19	228	113			3	3	6.01	4.09			0.28	0.28
Fri 20	216	125			3	3	6.20	3.75			0.31	0.31
Sat 21	260	126			4	4	6.38	4.03			0.40	0.40
Sun 22	317	121			3	3	6.82	3.32			0.32	0.32
Mon 23	311				4	4	7.72				0.40	0.40
Tue 24	282				5	5	7.27				0.50	0.50
Wed 25	307				4	4	8.90				0.60	0.60
Thu 26	290				5	5	8.07				0.65	0.65
Fri 27	287				4	4	8.03				0.52	0.52
Sat 28	293				4	4	7.48				0.60	0.60
Sun 29	303				6	6	7.29				0.64	0.64
Mon 30	396				6	6	7.47				0.73	0.73
Average	294	122	---	---	4	4	6.84	4.06	---	---	0.47	0.47
Minimum	201	108	---	---	2	2	4.94	3.32	---	---	0.20	0.20
Maximum	415	136	---	---	14	14	8.90	4.74	---	---	2.21	2.21
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH3-N (mg/L) RAW	OUTFALL 30	OUTFALL 20	EPEPS	OUTFALL 10 FEC	OUTFALL 10 FE	TKN (mg/L) RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC
Sun 01	39.8				2.83	2.83	75.8			4.52
Mon 02	34.3				3.40	3.40	58.2			5.00
Tue 03	42.1				4.54	4.54	59.0			6.11
Wed 04	44.3				3.32	3.32	54.1			4.77
Thu 05	43.0				3.48	3.48	62.6			5.19
Fri 06	43.8				3.23	3.23	61.5			4.93
Sat 07	44.2				3.57	3.57	60.6			5.48
Sun 08	46.2				3.73	3.73	60.4			5.65
Mon 09	40.5				2.98	2.98	58.4			5.81
Tue 10	33.6	31.0			3.28	3.28	47.4	44.1		6.02
Wed 11	37.8	32.9			2.40	2.40	54.5	39.7		8.79
Thu 12	39.9				4.13	4.13	61.8			6.42
Fri 13	33.5	28.7			4.89	4.89	47.2	38.0		6.57
Sat 14	27.0	29.1			2.09	2.09	38.5	39.1		3.88
Sun 15	27.3	29.7			1.23	1.23	40.8	37.4		2.96
Mon 16	30.6	32.5			1.97	1.97	46.3	39.7		3.77
Tue 17	17.0	25.5			2.65	2.65	33.1	33.1		4.47
Wed 18	24.3	30.7			1.20	1.20	39.3	39.6		2.96
Thu 19	29.9	34.1			2.73	2.73	44.2	42.6		4.62
Fri 20	30.9	31.4			2.80	2.80	47.5	40.2		4.73
Sat 21	31.6	35.3			3.42	3.42	48.0	42.5		5.25
Sun 22	14.5	24.3			2.64	2.64	54.9	41.4		4.27
Mon 23	39.9				3.47	3.47	59.8			5.39
Tue 24	38.0				2.66	2.66	55.3			5.24
Wed 25	36.6				2.34	2.34	63.6			4.57
Thu 26	37.7				3.51	3.51	55.9			5.75
Fri 27	38.1				3.15	3.15	58.9			5.96
Sat 28	33.8				3.76	3.76	56.8			6.71
Sun 29	38.7				3.79	3.79	54.9			6.18
Mon 30	35.1				3.57	3.57	54.3			6.61
Average	35.1	30.4	---	---	3.09	3.09	53.8	39.8	---	5.29
Minimum	14.5	24.3	---	---	1.20	1.20	33.1	33.1	---	2.96
Maximum	46.2	35.3	---	---	4.89	4.89	75.8	44.1	---	8.8
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	NO2+NO3 (mg/L) RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	Chloride (mg/L) RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	*E. coli* (Counts/100 mL) RAW X10^6	OUTFALL 30 X10^6	OUTFALL 20 X10^6	OUTFALL 10 FEC
Sun 01				15.3	121			172				2
Mon 02				16.0	114			141				13
Tue 03				14.0	113			125				9
Wed 04	0.16			15.8	114			108	2.6			12
Thu 05				16.3	108			107	2.3			10
Fri 06				19.7	103			101				2
Sat 07				19.0	86.2			98.6				7
Sun 08				18.6	86.6			87.2				5
Mon 09				17.2	111			91.7				1
Tue 10		0.43		14.5	119	127		117		2.4		10
Wed 11	< 0.01	0.31		12.1	164	114		149		1.0		110
Thu 12				14.2	100			144				10
Fri 13		0.38		15.8	180	196		136		0.8		20
Sat 14		0.31		15.4	100	110		156		1.7		22
Sun 15		0.62		13.1	103	103		114		1.4		23
Mon 16		0.51		13.4	138	182		109		1.8		18
Tue 17		0.72		13.1	164	176		200		1.5		29
Wed 18	0.04	0.39		10.5	106	115		144		1.0		29
Thu 19		0.32		12.7	110	123		118	1.5	1.2		36
Fri 20		0.57		14.8	105	100		118		1.7		16
Sat 21		0.07		15.5	119	154		118		2.8		13
Sun 22		0.26		14.5	96.1	109		121		1.2		13
Mon 23				15.2	104			113				11
Tue 24				15.6	109			112				6
Wed 25	< 0.01			15.8	104			112				15
Thu 26				14.7	94.0			110	1.7			14
Fri 27				14.7	102			109				14
Sat 28				14.2	89.0			112				25
Sun 29				13.7	88.6			101				36
Mon 30				14.7	85.5			92.1				19
Average	0.05	0.41	---	15.0	111.2	134	---	121.2	---	---	---	---
Minimum	0.01	0.07	---	10.5	85.5	100	---	87.2	1.5	0.8	---	1
Maximum	0.16	0.72	---	19.7	180	196	---	200	2.6	2.8	---	110
GeoMean	---	---	---	---	---	---	---	---	2.0	1.5	---	13
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

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

Enhanced Primary Treatment (EPT) Usage					
Total Bypass (hrs)	EPT Usage (hrs)	% Usage	Total Bypass YTD (hrs)	EPT Usage YTD	% Usage
87	87	100%	137	137	100.00%

Report Comments

1.	OUTFALL 30 - April 20, 2018: Analysis of one of two samples collected on April 20 was repeated and recommended holding time consequently exceeded the recommended holding time for *E. coli*.
2.	RAW - April 07, 2018: Analysis of this sample was repeated and exceeded the recommended holding time for BOD. BOD.

AEP Ref #**

** AEP - Alberta Environment & Parks

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

Abhisnek Bhargava
Senior Manager, Operations

Shane Harnish
Senior Manager, Analytical Operations