PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
November 2018

Digested Sludge: Total Monthly Volume (ML)	69.75

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent RAW	Effluent 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
Thu 01	334.60	245.50	0.00	0.00	0.00	0.00	245.50	245.50
Fri 02	394.70	273.80	0.00	0.00	0.00	0.00	273.80	273.80
Sat 03	514.00	310.60	34.20	0.00	0.00	0.00	276.40	276.40
Sun 04	491.30	328.60	35.10	0.00	0.00	0.00	293.50	293.50
Mon 05	354.90	269.30	0.00	0.00	0.00	0.00	269.30	269.30
Tue 06	367.80	257.20	0.00	0.00	3.10	0.00	254.10	254.10
Wed 07	338.80	258.50	0.00	0.00	11.60	0.00	246.90	246.90
Thu 08	335.00	253.10	0.00	0.00	11.30	0.00	241.80	241.80
Fri 09	357.60	263.20	0.00	0.00	11.50	0.00	251.70	251.70
Sat 10	395.90	263.50	0.00	0.00	11.50	0.00	252.00	252.00
Sun 11	350.20	243.80	0.00	0.00	11.40	0.00	232.40	232.40
Mon 12	365.80	251.10	0.00	0.00	10.10	0.00	241.00	241.00
Tue 13	333.60	247.00	0.00	0.00	11.40	0.00	235.60	235.60
Wed 14	337.60	262.40	0.00	0.00	11.50	0.00	250.90	250.90
Thu 15	423.40	317.60	0.00	0.00	12.50	0.00	305.10	305.10
Fri 16	341.80	257.10	0.00	0.00	13.10	0.00	244.00	244.00
Sat 17	327.90	249.70	0.00	0.00	11.80	0.00	237.90	237.90
Sun 18	516.60	307.20	28.40	0.00	11.20	0.00	267.60	267.60
Mon 19	377.40	288.20	0.00	0.00	11.60	0.00	276.60	276.60
Tue 20	355.70	267.40	0.00	0.00	11.70	0.00	255.70	255.70
Wed 21	334.70	258.70	0.00	0.00	11.90	0.00	246.80	246.80
Thu 22	332.00	257.90	0.00	0.00	12.20	0.00	245.70	245.70
Fri 23	331.90	254.40	0.00	0.00	12.70	0.00	241.70	241.70
Sat 24	335.90	253.50	0.00	0.00	12.90	0.00	240.60	240.60
Sun 25	337.50	250.70	0.00	0.00	12.50	0.00	238.20	238.20
Mon 26	334.60	252.60	0.00	0.00	11.90	0.00	240.70	240.70
Tue 27	343.40	252.40	0.00	0.00	11.10	0.00	241.30	241.30
Wed 28	334.80	265.60	0.00	0.00	11.10	0.00	254.50	254.50
Thu 29	320.10	249.70	0.00	0.00	11.00	0.00	238.70	238.70
Fri 30	308.20	243.90	0.00	0.00	11.40	0.00	232.50	232.50
Average	364.26	265.14	3.26	0.00	9.47	0.00	252.42	252.42
Minimum	308.20	243.80	0.00	0.00	0.00	0.00	232.40	232.40
Maximum	516.60	328.60	35.10	0.00	13.10	0.00	305.10	305.10
GeoMean	---	---	---	---	---	---	---	---
TOTAL	---	7,954	98	0	284	0	7,572	7,572

Liquid Stream Quality

DATE	pH@25°C RAW	pH OUTFALL 30	pH OUTFALL 20	pH OUTFALL 10 FEC	TSS RAW	TSS OUTFALL 30	TSS OUTFALL 20	TSS EPEPS	TSS OUTFALL 10 FEC	TSS OUTFALL 10 FE	BOD_5/$cBOD_5$ RAW	BOD_5 OUTFALL 30	BOD_5 OUTFALL 20	BOD_5 EPEPS	$cBOD_5$ OUTFALL 10 FEC	$cBOD_5$ OUTFALL 10 FE
Thu 01	7.5			7.7	348				4.4	4.4	307				3	3
Fri 02	7.5			7.6	335				12.1	12.1	311				5	5
Sat 03	7.5	7.4		7.5	370	122			8.4	8.4	246	127			3	3
Sun 04	7.7	7.5		7.5	296	107			9.8	9.8	223	159			3	3
Mon 05	7.5			7.5	320				14.4	14.4	317				5	5
Tue 06	7.6			7.5	308				8.1	8.1	236				3	3
Wed 07	7.4			7.6	320				6.9	6.9	307				3	3
Thu 08	7.4			7.6	360				8.9	8.9	422				4	4
Fri 09	7.4			7.7	308				13.4	13.4	318				5	5
Sat 10	7.5			7.5	273				11.9	11.9	259				4	4
Sun 11	7.5			7.6	252				5.7	5.7	277				4	4
Mon 12	7.5			7.7	276				6.2	6.2	282				3	3
Tue 13	7.5			7.6	304				5.4	5.4	321				3	3
Wed 14	7.5			7.6	312				5.3	5.3	284				3	3
Thu 15	7.5			7.5	356				17.0	17.0	236				5	5
Fri 16	7.7			7.4	311				4.1	4.1	267				3	3
Sat 17	7.6			7.6	288				3.9	3.9	418				3	3
Sun 18	7.5	7.4		7.6	297	114			3.9	3.9	242	138			3	3
Mon 19	7.5			7.1	320				36.4	36.4	288				9	9
Tue 20	7.6			7.3	316				23.8	23.8	268				7	7
Wed 21	7.5			7.6	343				5.6	5.6	250				3	3
Thu 22	7.6			7.7	343				6.8	6.8	268				3	3
Fri 23	7.5			7.7	306				4.2	4.2	297				3	3
Sat 24	7.5			7.6	312				12.8	12.8	310				5	5
Sun 25	7.6			7.7	300				7.2	7.2	358				4	4
Mon 26	7.6			7.6	348				7.1	7.1	293				4	4
Tue 27	7.7			7.6	284				4.9	4.9	311				3	3
Wed 28	7.9			7.5	370				20.0	20.0	306				9	9
Thu 29	7.5			7.6	244				14.6	14.6	339				6	6
Fri 30	7.6			7.7	336				7.6	7.6	353				4	4
Average	7.5	7.4	---	7.6	315	114	---	---	10.0	10.0	297	141	---	---	4.2	4.2
Minimum	7.4	7.4	---	7.1	244	107	---	---	3.9	3.9	223	127	---	---	3	3
Maximum	7.9	7.5	---	7.7	370	122	---	---	36.4	36.4	422	159	---	---	9	9
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

DATE	TP RAW	TP OUTFALL 30	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE	NH3-N RAW	NH3-N OUTFALL 30	NH3-N OUTFALL 20	NH3-N EPEPS	NH3-N OUTFALL 10 FEC	NH3-N OUTFALL 10 FE	TKN RAW	TKN OUTFALL 30	TKN OUTFALL 20	TKN OUTFALL 10 FEC
Thu 01	7.26				0.26	0.26	37.5				0.45	0.45	54.0			2.04
Fri 02	6.41				0.54	0.54	27.9				0.77	0.77	48.1			3.14
Sat 03	7.19	3.95			0.47	0.47	19.2	28.7			0.77	0.77	48.8	37.2		2.74
Sun 04	5.06	4.20			0.36	0.36	28.1	28.5			0.56	0.56	40.3	37.5		2.23
Mon 05	6.24				0.53	0.53	32.7				0.82	0.82	52.5			3.24
Tue 06	6.31				0.37	0.37	36.6				1.55	1.55	53.3			3.47
Wed 07	6.76				0.36	0.36	34.8				1.91	1.91	55.4			3.94
Thu 08	6.97				0.44	0.44	37.8				1.89	1.89	57.2			4.12
Fri 09	7.11				0.54	0.54	31.9				2.20	2.20	54.4			4.70
Sat 10	6.56				0.51	0.51	32.1				2.33	2.33	53.6			5.04
Sun 11	6.42				0.31	0.31	28.8				2.28	2.28	54.3			4.46
Mon 12	6.57				0.31	0.31	37.8				2.39	2.39	53.8			4.55
Tue 13	6.76				0.24	0.24	36.7				2.12	2.12	53.5			3.81
Wed 14	6.67				0.28	0.28	30.5				1.41	1.41	47.0			3.15
Thu 15	6.27				0.63	0.63	29.0				1.93	1.93	50.4			4.83
Fri 16	6.74				0.24	0.24	35.6				2.26	2.26	57.2			4.13
Sat 17	6.89				0.21	0.21	35.6				2.71	2.71	57.1			4.52
Sun 18	5.95	3.79			0.24	0.24	29.8	28.4			2.68	2.68	49.5	41.2		4.58
Mon 19	6.31				2.36	2.36	29.8				6.77	6.77	51.4			10.6
Tue 20	6.37				1.65	1.65	35.4				9.58	9.58	49.0			12.8
Wed 21	6.45				0.33	0.33	34.0				4.00	4.00	52.4			5.75
Thu 22	6.28				0.35	0.35	35.4				2.49	2.49	52.0			4.38
Fri 23	6.52				0.25	0.25	32.6				2.74	2.74	52.7			4.12
Sat 24	6.42				0.49	0.49	36.7				2.28	2.28	53.6			4.81
Sun 25	6.55				0.31	0.31	38.2				3.25	3.25	57.5			5.05
Mon 26	6.41				0.28	0.28	36.0				3.61	3.61	55.9			5.40
Tue 27	6.46				0.26	0.26	34.0				2.70	2.70	55.4			4.78
Wed 28	6.88				0.83	0.83	37.2				5.33	5.33	57.4			7.76
Thu 29	6.60				0.69	0.69	33.4				4.61	4.61	56.1			7.46
Fri 30	6.54				0.35	0.35	35.9				2.88	2.88	53.6			4.92
Average	6.53	3.98	---	---	0.50	0.50	33.4	28.5	---	---	2.71	2.71	52.9	38.6	---	4.88
Minimum	5.06	3.79	---	---	0.21	0.21	19.2	28.4	---	---	0.45	0.45	40.3	37.2	---	2.04
Maximum	7.26	4.20	---	---	2.36	2.36	38.2	28.7	---	---	9.58	9.58	57.5	41.2	---	12.8
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NO_2+NO_3 RAW	NO_2+NO_3 OUTFALL 30	NO_2+NO_3 OUTFALL 20	NO_2+NO_3 OUTFALL 10 FEC	Chloride RAW	Chloride OUTFALL 30	Chloride OUTFALL 20	Chloride OUTFALL 10 FEC	*E. coli* RAW X10^6	*E. coli* OUTFALL 30 X10^6	*E. coli* OUTFALL 20 X10^6	*E. coli* OUTFALL 10 FEC
Thu 01				7.88	77.9			80.0				4
Fri 02				6.14	170			90.3				5
Sat 03		0.28		5.79	128	126		171		1.4		13
Sun 04		0.05		5.00	77.9	79.7		116		2.2		4
Mon 05				4.59	150			106				3
Tue 06				4.35	94.6			134				5
Wed 07	< 0.01			5.00	88.4			106	2.2			5
Thu 08				4.15	85.8			101				7
Fri 09				4.31	252			118				5
Sat 10				3.90	179			260				6
Sun 11				4.90	91.0			178				7
Mon 12				5.21	82.7			108				6
Tue 13				5.28	98.7			94.2				9
Wed 14	< 0.01			5.71	94.2			108				7
Thu 15				5.66	152			137				21
Fri 16				5.06	166			139				9
Sat 17				5.19	169			129				5
Sun 18		1.18		5.88	511	705		196		0.4		5
Mon 19				2.98	238			382				2
Tue 20				4.44	154			301	2.5			14
Wed 21	0.02			5.94	117			179				11
Thu 22				6.43	117			125				8
Fri 23				5.73	103			117				14
Sat 24				7.36	82.7			107				11
Sun 25				8.19	80.0			87.5				14
Mon 26				7.16	83.2			82.7				12
Tue 27				7.43	90.2			89.0				12
Wed 28	0.05			7.36	107			97.9				18
Thu 29				8.81	99.4			102				15
Fri 30				8.76	126			106				18
Average	0.02	0.50	---	5.82	136	304	---	138	---	---	---	---
Minimum	0.05	0.01	---	2.98	77.9	79.7	---	80.0	2.2	0.4	---	2
Maximum	0.05	1.18	---	8.81	511	705	---	382	2.5	2.2	---	21
GeoMean	---	---	---	---	---	---	---	---	2.3	1.1	---	8
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

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

Enhanced Primary Treatment (EPT) Usage					
Total Bypass (hrs)	EPT Usage (hrs)	%	Total Bypass YTD (hrs)	EPT Usage YTD	% Usage YTD
21	21	100%	373	378	98.70%

Report Comments

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).
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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