PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
February 2019

Digested Sludge: Total Monthly Volume (ML)	62.50

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 OUTFALL 20	UV Disinfected EPEPS	UV Disinfected OUTFALL 10 FEC	UV Disinfected OUTFALL 10 FE
Fri-01	324.90	250.00	0.00	0.00	12.40	0.00	0.00	237.60	237.60
Sat-02	344.80	246.50	0.00	0.00	12.40	0.00	0.00	234.10	234.10
Sun-03	358.30	249.00	0.00	0.00	12.60	0.00	0.00	236.40	236.40
Mon-04	335.50	249.10	0.00	0.00	12.20	0.00	0.00	236.90	236.90
Tue-05	328.00	247.00	0.00	0.00	12.80	0.00	0.00	234.20	234.20
Wed-06	329.50	245.60	0.00	0.00	12.20	0.00	0.00	233.40	233.40
Thu-07	329.10	245.00	0.00	0.00	12.10	0.00	0.00	232.90	232.90
Fri-08	321.50	244.30	0.00	0.00	11.40	0.00	0.00	232.90	232.90
Sat-09	342.60	246.70	0.00	0.00	11.80	0.00	0.00	234.90	234.90
Sun-10	356.60	250.20	0.00	0.00	12.40	0.00	0.00	237.80	237.80
Mon-11	337.40	250.40	0.00	0.00	12.60	0.00	0.00	237.80	237.80
Tue-12	336.10	247.70	0.00	0.00	12.40	0.00	0.00	235.30	235.30
Wed-13	339.80	246.40	0.00	0.00	12.50	0.00	0.00	233.90	233.90
Thu-14	324.20	244.20	0.00	0.00	12.60	0.00	0.00	231.40	231.40
Fri-15	413.00	249.40	0.00	0.00	12.60	0.00	0.00	236.80	236.80
Sat-16	448.70	275.70	0.00	0.00	12.70	0.00	0.00	263.00	263.00
Sun-17	341.10	240.30	0.00	0.00	12.90	0.00	0.00	227.40	227.40
Mon-18	343.00	245.50	0.00	0.00	12.70	0.00	0.00	232.80	232.80
Tue-19	329.80	243.70	0.00	0.00	12.50	0.00	0.00	231.20	231.20
Wed-20	338.10	248.50	0.00	0.00	11.70	0.00	0.00	236.80	236.80
Thu-21	328.60	243.80	0.00	0.00	12.00	0.00	0.00	231.80	231.80
Fri-22	326.20	245.90	0.00	0.00	11.00	0.00	0.00	234.90	234.90
Sat-23	346.10	244.70	0.00	0.00	11.10	0.00	0.00	233.60	233.60
Sun-24	352.60	249.40	0.00	0.00	11.70	0.00	0.00	237.70	237.70
Mon-25	344.80	250.90	0.00	0.00	12.00	0.00	0.00	238.90	238.90
Tue-26	332.40	248.70	0.00	0.00	11.50	0.00	0.00	237.20	237.20
Wed-27	332.40	249.00	0.00	0.00	11.70	0.00	0.00	237.30	237.30
Thu-28	326.80	246.30	0.00	0.00	12.10	0.00	0.00	234.20	234.20
Average	343.28	248.00	0.00	0.00	12.17	0.00	0.00	235.83	235.83
Minimum	321.50	240.30	0.00	0.00	11.00	0.00	0.00	227.40	227.40
Maximum	448.70	275.70	0.00	0.00	12.90	0.00	0.00	263.00	263.00
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	6,944	0	0	341	0.00	0	6,603	6,603

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
Fri-01	7.6			7.6	372				5.1	5.1
Sat-02	7.5			7.5	356				5.7	5.7
Sun-03	7.5			7.6	324				6.7	6.7
Mon-04	7.7			7.4	368				6.5	6.5
Tue-05	7.4			7.5	328				6.3	6.3
Wed-06	7.6			7.5	320				6.2	6.2
Thu-07	7.6			7.4	340				4.8	4.8
Fri-08	7.5			7.4	264				5.2	5.2
Sat-09	7.6			7.5	348				5.0	5.0
Sun-10	7.6			7.6	352				5.1	5.1
Mon-11	7.5			7.5	408				5.5	5.5
Tue-12	7.5			7.4	284				6.3	6.3
Wed-13	7.6			7.5	340				5.6	5.6
Thu-14	7.6			7.5	312				6.0	6.0
Fri-15	7.5			7.4	412				5.8	5.8
Sat-16	7.5			7.5	392				5.3	5.3
Sun-17	7.6			7.4	272				5.0	5.0
Mon-18	7.5			7.4	320				5.8	5.8
Tue-19	7.6			7.5	300				6.2	6.2
Wed-20	7.5			7.5	304				7.6	7.6
Thu-21	7.6			7.5	304				7.2	7.2
Fri-22	7.5			7.3	328				6.2	6.2
Sat-23	7.8			7.5	420				6.7	6.7
Sun-24	7.5			7.4	290				6.6	6.6
Mon-25	7.6			7.5	312				5.4	5.4
Tue-26	7.7			7.5	292				6.0	6.0
Wed-27	7.5			7.4	396				6.0	6.0
Thu-28	7.5			7.4	368				6.4	6.4
Average	7.6	---	---	7.5	337	---	---	---	5.9	5.9
Minimum	7.4	---	---	7.3	264	---	---	---	4.8	4.8
Maximum	7.8	---	---	7.6	420	---	---	---	7.6	7.6
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	$BOD_5/cBOD_5$ (mg/L) RAW BOD_5	OUTFALL 30 BOD_5	OUTFALL 20 BOD_5	EPEPS BOD_5	OUTFALL 10 FEC $cBOD_5$	OUTFALL 10 FE $cBOD_5$	TP (mg/L) RAW	TP OUTFALL 30	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE
Fri-01	294				3	3	10.3				0.30	0.30
Sat-02	332				4	4	8.74				0.41	0.41
Sun-03	348				4	4	9.46				0.29	0.29
Mon-04	408				4	4	9.39				0.32	0.32
Tue-05	316				4	4	9.16				0.32	0.32
Wed-06	258				3	3	8.40				0.33	0.33
Thu-07	318				4	4	8.30				0.26	0.26
Fri-08	345				4	4	7.76				0.28	0.28
Sat-09	354				4	4	8.42				0.29	0.29
Sun-10	379				4	4	7.77				0.30	0.30
Mon-11	327				3	3	8.67				0.30	0.30
Tue-12	337				4	4	7.81				1.31	1.31
Wed-13	306				4	4	7.80				0.34	0.34
Thu-14	357				4	4	8.90				0.29	0.29
Fri-15	365				4	4	8.48				0.32	0.32
Sat-16	262				4	4	7.01				0.28	0.28
Sun-17	275				4	4	7.22				0.28	0.28
Mon-18	334				4	4	8.72				0.29	0.29
Tue-19	340				4	4	6.80				0.30	0.30
Wed-20	331				4	4	7.26				0.31	0.31
Thu-21	343				4	4	7.60				0.33	0.33
Fri-22	303				4	4	8.38				0.34	0.34
Sat-23	343				4	4	7.53				0.34	0.34
Sun-24	352				4	4	6.95				0.36	0.36
Mon-25	376				4	4	7.24				0.33	0.33
Tue-26	318				4	4	7.22				0.34	0.34
Wed-27	338				4	4	7.15				0.33	0.33
Thu-28	317				4	4	7.48				0.33	0.33
Average	331	---	---	---	4	4	8.07	---	---	---	0.35	0.35
Minimum	258	---	---	---	3	3	6.80	---	---	---	0.26	0.26
Maximum	408	---	---	---	4	4	10.3	---	---	---	1.31	1.31
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH3-N (mg/L) RAW	NH3-N OUTFALL 30	NH3-N OUTFALL 20	NH3-N EPEPS	NH3-N OUTFALL 10 FEC	NH3-N OUTFALL 10 FE	TKN (mg/L) RAW	TKN OUTFALL 30	TKN OUTFALL 20	TKN OUTFALL 10 FEC	NO_2+NO_3 (mg/L) RAW	NO_2+NO_3 OUTFALL 30	NO_2+NO_3 OUTFALL 20	NO_2+NO_3 OUTFALL 10 FEC	Chloride (mg/L) RAW	Chloride OUTFALL 30	Chloride OUTFALL 20	Chloride OUTFALL 10 FEC	*E. coli* (Counts/100 mL) RAW X10^6	*E. coli* OUTFALL 30 X10^6	*E. coli* OUTFALL 20 X10^6	*E. coli* OUTFALL 10 FEC
Fri-01	42.5				3.12	3.12	72.6			4.91				11.6	141			238				5
Sat-02	38.4				3.62	3.62	63.2			6.02				12.0	93.0			150				6
Sun-03	45.3				3.59	3.59	68.0			5.48				13.5	75.8			103				4
Mon-04	47.9				2.99	2.99	68.5			4.92				13.9	77.5			80.4				5
Tue-05	45.1				3.42	3.42	63.6			5.63				13.8	79.4			83.6				5
Wed-06	46.2				3.65	3.65	62.9			5.59	0.01			13.1	76.0			83.7				1
Thu-07	45.8				3.02	3.02	62.6			4.62				13.8	72.5			85.0				3
Fri-08	43.5				2.36	2.36	67.0			3.39				14.6	84.4			87.7				7
Sat-09	46.2				3.03	3.03	68.3			4.65				14.0	73.2			88.6				4
Sun-10	43.5				2.92	2.92	63.8			5.03				14.2	68.9			79.5				1
Mon-11	42.1				3.53	3.53	67.5			5.40				14.8	83.9			79.7				6
Tue-12	46.6				3.31	3.31	63.0			5.48				12.8	88.5			83.0				5
Wed-13	43.7				2.68	2.68	62.1			4.49	0.04			14.9	88.5			90.2				6
Thu-14	45.6				3.32	3.32	63.8			4.94				16.4	85.4			92.1				5
Fri-15	44.1				2.26	2.26	63.4			4.06				17.8	87.2			86.3	2.1			10
Sat-16	41.0				3.52	3.52	57.0			5.28				15.4	74.7			86.4				5
Sun-17	45.0				2.77	2.77	62.8			4.30				15.8	81.5			81.9				4
Mon-18	45.9				2.62	2.62	76.6			3.86				17.3	80.9			91.7				5
Tue-19	43.4				2.19	2.19	58.8			3.28				17.4	102			85.9				4
Wed-20	45.3				1.00	1.00	67.0			3.02	< 0.01			16.6	127			109				7
Thu-21	45.4				0.88	0.88	64.6			2.64				17.5	135			135	2.5			2
Fri-22	45.0				1.31	1.31	61.9			2.31				17.9	125			133				6
Sat-23	47.7				1.81	1.81	64.8			3.84				17.7	122			134				7
Sun-24	45.5				2.45	2.45	62.0			4.24				19.2	104			113				12
Mon-25	49.1				2.09	2.09	64.1			4.59				17.0	101			99.1				12
Tue-26	47.0				0.98	0.98	62.9			2.99				19.6	103			103				15
Wed-27	44.2				1.01	1.01	63.4			2.90	< 0.01			19.2	111			103				17
Thu-28	43.6				0.86	0.86	62.0			2.59				18.0	114			115				9
Average	44.8	---	---	---	2.51	2.51	64.6	---	---	4.30	0.02	---	---	15.7	94.9	---	---	104	---	---	---	---
Minimum	38.4	---	---	---	0.86	0.86	57.0	---	---	2.31	< 0.01	---	---	11.6	68.9	---	---	79.5	2.1	---	---	1.0
Maximum	49.1	---	---	---	3.65	3.65	76.6	---	---	6.02	0.04	---	---	19.6	141	---	---	238	2.5	---	---	17.0
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2.29	---	---	5.285
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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

Enhanced Primary Treatment (EPT) Usage

Total Bypass (hrs)	EPT Usage (hrs)	% Usage	Total Bypass YTD (hrs)	EPT Usage YTD	% Usage
2	2	100%	6	6	100.00%

Report Comments

1	RAW - February 28: Analysis of this sample exceeded the recommended holding time for BOD.

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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