PROVIDING MORE	FPCOR
Providing Porc	Eroun

Gold Bar Wastewater Treatment Plant Plant Performance Report December 2016

		1																																												<u> </u>
				Volume o	f Flow (MI	_)		Liquid Stream Quality																																						
		t																																												
		uffue			Effluent																																									
			Nor	UV	Lindent																																									
			Disinf		UV	Disinfected			pH@25°C		_		TSS (mg/L)				BOD ₅ /cl	BOD ₅ (mg/L)					TP (mg/L)					NH3-N	l (mg/L)				TKN (mg/L)			NO ₂ +NO	0 ₃ (mg/L)			Chloride ((mg/L)		E. coli (Co	ounts/100 mL	(
			SS																		-110																							1 . 1	A	
			YP/			OUTFALL10				F					F1		13	L20			IFAI					P -					F1				19				-F10			- -		13	L20	- F
			30 E	8				e e	R R	IFAI		8	50		IFAI		IFAI	IFAI	Sdi		0		R	8		IFAI		8	8		IFAI		ş	R R	IFAI		8	50	IFAI		8	50	2	FA	FAI	IFAI
			ALL	ALL	ý					Б		ALL	ALL	ý	Бо	RA	w 5	Б	EPE	FEC	FE		ALL	ALL	ş	Б		ALL	ALL	ý	Б			ALL	Бо		ALL	ALL	ГЛО		ALL	ALL	RAN	5	5	Б
	Peak Flow (MLD)	RAW	5	5	ЬE	FEC F	-	5	5 5		PAW	5	5	ЪЕ		во	D ₅ BOD ₅	BODs	BOD ₅	cBOD			5	5			- PAW	5	5	E E				5 5	FEC		5	5	FEC		5	5 _		//	X10^6	FEC
DATE Thu 01	(MLD) 344.98		0.00	MPW 0 10.26 0.0	0.00	235.11 23	5.11	7.7		7.5	NAT .		0	ш 	4.4 4.4			BOD5	BOD5	3	cBOD ₅	RAW 10.70	0	• 	0.9) 0.9		0	o		2.31	2.31	67.2	0 0		RAW	0	0	10.8	81.9	0		C X10^6	X10^6	X10^6	20 20
Fri 02	349.08	249.21		9.74 0.0				7.7							4.2 4.3					4	4	10.90			0.4						1.50		78.0		3.39				11.7	84.8			39.2			19
Sat 03	390.74	246.76	0.00	9.54 0.0		237.22 23	7.22	7.7		7.5					3.6 3.6					4	4	8.72			0.2						1.69		69.8		3.66				11.9	78.3			90.4			19
Sun 04	385.26	250.84	0.00	10.24 0.0	0.00	240.60 24	0.60	7.8		7.5	344				4.2 4.2	2 32	4			3	3	8.84			0.3	0.3	30 39.4				2.97	2.97	68.5		5.02				12.2	82.4			91.0			21
Mon 05	371.84	255.70	0.00	8.57 0.0	0.00	247.13 24	7.13	7.8		7.6	284				5.0 5.0	27	9			4	4	8.89			0.3	0.3	31 46.2				2.11	2.11	68.2		4.06				13.0	82.2			34.1			11
Tue 06	352.92	251.73	0.00	9.76 0.0	0.00	241.97 24	1.97	7.5		7.4	234				4.7 4.7	7 31	1			4	4	9.21			0.3	5 0.3	35 49.1				1.94	1.94	68.2		4.32				11.1	84.1			35.5			10
Wed 07	351.81	253.07	0.00	10.02 0.0		243.05 24	3.05	7.7		7.5	358				4.5 4.5		3			4	4	8.55			0.4		47.8				2.67		69.3		4.55	< 0.01			13.0	102			34.4			5
Thu 08	346.09	253.93		9.13 0.0			4.80	7.8		7.4	391				5.0 5.0					4	4	8.71			0.2						3.29	0.00	66.7		5.28				12.1	88.5			91.7			12
Fri 09	344.00	251.91	0.00	9.88 0.0				7.7		7.5	350				4.7 4.7					4	4	8.60			0.3						3.24		67.2		5.83				11.3	82.2			94.6			16
Sat 10	377.82	248.07	0.00	10.24 0.0			1.00	7.7		7.5					4.0 4.0					4	4	9.49			0.3						3.44	-	73.0		5.03				11.1	80.7			38.9			23
Sun 11	379.88	247.91		9.42 0.0				7.8		7.5					4.3 4.3					4	4	8.12			0.2						3.41		67.9		5.33				11.5	76.1			84.1			12
Mon 12	353.39	254.59		9.28 0.0			5.31	7.7		7.6					5.4 5.4					4	4	7.97		·	0.5						3.15		68.5		4.75				10.4	83.6			79.6			12
Tue 13 Wed 14	345.06	249.81	0.00	9.96 0.0			9.85	7.7		7.5	300				4.1 4.1					4	4	6.92			0.3						2.03		54.7		4.16				11.5	87.6			92.8			14
Thu 15	339.79	249.24		9.37 0.0			9.87	7.7		7.3	308				3.9 3.9					4	4	9.10		·	0.2						2.85		71.7		4.39	0.04			12.1	96.5			94.0			13
Fri 16	336.72	249.59 249.39	0.00	8.80 0.0 9.82 0.0		240.79 24	0.79	7.6		7.6	400				3.1 3.1					3	3	9.95		·	0.2						2.12		60.5		4.55				12.2	88.1			101			9
Sat 17	361.12 389.70	249.39	0.00	9.82 0.0 10.50 0.0			9.57 2.82	7.8		7.5	310 326				3.7 3.9					4	4	9.54 8.31			0.2						2.16		70.2		3.94				12.5 11.7	79.8 70.3			93.8 35.1			9
Sun 18	389.70	243.32		10.50 0.0			-	7.9		7.6	326				3.9 3.9		•			4	4	8.31 7.63			0.2		-				0.73		59.4		3.33				7.8	70.3			35.1 76.7			19 20
Mon 19	345.98	240.98		10.40 0.0				7.9		7.6	274				3.4 3.4					4	4	7.53			0.1						0.73		55.0		2.40	-			7.3	75.5			84.5			20
Tue 20	343.39	250.00		10.06 0.0			1.69	7.6		7.6					3.3 3.1					*	-	7.53			0.2						0.95		56.6		2.55	-			7.8	85.8			92.2 4.5			9
Wed 21	369.87	243.48	0.00	9.96 0.0			3.52	7.6		7.4	300				40 40					2	2	8.09			0.2						0.95		60.5			< 0.01			7.0	88.4			92.2 4.5			9
Thu 22	341.96	249.36		9.66 0.0				7.7		7.5					3.8 3.8					2	2	8.15			0.3						0.71		62.4			< 0.01			9.1	107			99.7 2.3			5
Fri 23	388.85	247.72	0.00	9.77 0.0				76		7.5	332				3.0 3.0					< 2	< 2	8.10			0.2						0.66	-	62.1		2.35				10.4	84.1			36.7			6
Sat 24	404.72	240.04	0.00	9.56 0.0				7.9		7.5					2.9 2.9					3	3	8.26			0.2						1.35		62.3		3.18				9.8	83.7			95.7			20
Sun 25	336.21	221.63		9.66 0.0		211.97 21		77							3.4 3.4		4			< 2	< 2	8.12			0.1						1.55		63.0						10.5	74.9			38.0			8
Mon 26	352.05	223.15	0.00	9.81 0.0			3.34	7.7		7.4					2.9 2.9					< 2	< 2	8.62			0.2						1.96		67.1		4.00				11.4	78.8			34.2			22
Tue 27	359.40	236.72		9.62 0.0				7.6		7.4					3.5 3.5					2	2	7.72			0.1						3.06		64.6						10.8	87.6			31.6			9
Wed 28	396.38	242.66		9.50 0.0			3.16	7.7		7.5					3.3 3.3					< 2	< 2	7.72			0.2		-				2.18		63.9			2.06			10.4	98.1			92.7			1,200
Thu 29	355.46	242.10		9.62 0.0				7.7			297				3.7 3.7					2	2	8.69			0.2						1.83		68.0			1			10.8	99.6			107			12
Fri 30	407.03	241.52		9.68 0.0				7.8			316				3.8 3.8					3	3	8.39			0.2						2.46		66.8		4.84	1			12.0	94.8			99.9			12
Sat 31	365.46	240.94	0.00	9.77 0.0	0.00	231.17 23	1.17	7.8		7.5	334				3.8 3.8	3 30	5			2	2	8.13			0.2	6 0.2	26 38.3				2.15	2.15	64.3		4.51				12.6	109			104			40
Average	363.30	245.91	0.00	9.74 0.0	0.00	236.18 23		7.7		7.5					3.9 3.9					3	3	8.55			0.3						2.05		65.2		4.02	0.53			11.0	86.5			91.0			
Minimum	336.21	221.63	0.00	8.57 0.0	0.00	211.97 21		7.5		7.3 7.7	234 400				2.9 2.9					< 2	< 2	6.92			0.1						0.51 3.44		54.7 78.0		2.35	< 0.01			7.3	70.3 109			76.7 2.3 107 4.5			5
Maximum GeoMean	407.03	255.70	0.00	10.50 0.0	0.00	247.13 24	7.13	7.9		1.7	400				5.4 5.4	+ 36	5			4	4	10.90			0.9) 0.9	50 61.7				3.44	3.44	0.87		5.83	2.06			13.0	109			107 4.5 3.2			1200
TOTAL		7,623	0	302 0.0	0 0	7,321 7,	321																																							
		* contact				assurance associate	ed with the	result																																				-		
															RAW Untrea	and the first second for	to the Direct						FF	Elevel Efference						raviolet disinfection																

Enhanced Primary Treatment (EPT) Usage												
Total Bypass (hrs)	EPT Usage (hrs)	% Usage	Total Bypass YTD (hrs)	EPT Usage YTD (hrs)	% Usage YTD							
0	0	100%	438	438	100.00%							

Report Comments									

AEP Ref #			

* AEP - Alberta Environment & Parks

- RAW Untreated Influent into the Plant INF Untreated Wastewater from collection system INF 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 and Pump Station

Abbuts Manghan I

Abhishek Bhargava Senior Manager, Operations

Shane Harnish Senior Manager, Analytical Operations
 Image: Control of the second any treatment process (with biological nutrient removal). Pre-Ultraviolet disinfection.

 FEC
 Combined pre-UV disinfection (Fe+EPEPS)

 OUTFALL 10
 UV-disinfection (Fe+EPEPS)

 OUTFALL 30
 Combined process (RAW + PE + EPE)

 OUTFALL 30
 Combined process (RAW + PE + EPE)

 MPW
 Membrane Product Water (Elliumt re-use water)

 ML
 Megafirer (100000 Utre)

 MPN
 Mose Probable Number

 N
 No Sample

 IN
 Insufficient Sample

Digested Sludge: Total Monthly Volume (ML) 64.13