PROVIDING MORE EPCOR

Gold Bar Waste Water Treatment Plant
Plant Performance Report
December, 2015

Digested Sludge: Total Monthly Volume (ML)	60.55

Volume of Flow (ML)

Liquid Stream Quality

DATE	Peak Flow (MLD)	Influent	Effluent				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)		
			Non UV Disinfected		UV Disinfected													OUTFAL 10								OUTFAL 10											
						OUTFAL 10							OUTFAL 10				OUTFAL 10							OUTFAL 10													
																	FEC	FE																				
		RAW	OUT-FAL30 BYPASS	MPW	EPEPS	FEC	FE	RAW	OUT-FAL30	OUT-FAL10 FEC	RAW	OUT-FAL30	EPEPS	FEC	FE	RAW BOD$_5$	OUT-FAL30 BOD$_5$	EPEPS cBOD$_5$	FEC cBOD$_5$	FE cBOD$_5$	RAW	OUT-FAL30	EPEPS	FEC	FE	RAW	OUT-FAL30	EPEPS	FEC	FE	RAW	OUT-FAL30	OUT-FAL10 FEC	RAW	OUT-FAL30	OUT-FAL10 FEC	RAW	OUT-FAL30	OUT-FAL10 FEC
Tue 01	347.12	248.01	0.00	10.10		237.91	237.91	7.6		7.6	280			3.1	3.1	202			2	2	6.56			0.21	0.21	37.2			0.29	0.29	54.2		1.8			9.0	80		82.0			5
Wed 02	350.57	250.42	0.00	8.91		241.51	241.51	7.6		7.6	325			3.5	3.5	370			3	3	6.78			0.31	0.31	34.9			0.30	0.30	57.4		1.7			8.2	100		86.0			4
Thu 03	343.32	249.40	0.00	9.69		239.71	239.71	7.6		7.5	310			3.9	3.9	374			3	3	7.53			0.27	0.27	37.7			0.17	0.17	60.0		1.6			8.5	85		100.0			4
Fri 04	344.94	249.60	0.00	8.42		241.18	241.18	7.6		7.6	294			3.6	3.6	322			3	3	6.86			0.37	0.37	38.8			0.49	0.49	56.3		2.0			8.8	92		99.0			4
Sat 05	375.76	245.98	0.00	9.05		236.93	236.93	7.7		7.9	267			3.7	3.7	310			2	2	6.79			0.22	0.22	39.6			1.03	1.03	55.7		2.8			9.5	76		95.0			3
Sun 06	376.60	254.51	0.00	9.24		245.27	245.27	7.5		7.5	263			3.8	3.8	325			3	3	6.73			0.21	0.21	39.3			1.97	1.97	55.3		3.5			9.2	72		85.0			5
Mon 07	341.77	250.22	0.00	9.65		240.57	240.57	7.6		7.6	306			5.2	5.2	322			4	4	7.66			0.30	0.30	36.3			1.36	1.36	54.6		3.1			8.6	84		78.0			5
Tue 08	341.39	235.10	0.00	12.06		223.04	223.04	7.6		7.6	290			4.9	4.9	333			3	3	6.69			0.21	0.21	37.7			0.43	0.43	53.0		1.9			9.5	80		89.0			4
Wed 09	340.79	244.85	0.00	11.53		233.32	233.32	7.4		7.5	310			4.8	4.8	336			4	4	6.80			0.24	0.24	38.4			0.45	0.45	53.7		1.8			9.8	84		91.0			5
Thu 10	337.57	246.13	0.00	10.66		235.47	235.47	7.6		7.7	309			5.9	5.9	327			3	3	6.41			0.28	0.28	38.7			0.28	0.28	50.9		1.9			9.0	88		91.0			5
Fri 11	332.78	245.54	0.00	11.71		233.83	233.83	7.6		7.6	286			5.5	5.5	316			3	3	8.01			0.33	0.33	40.0			0.28	0.28	57.2		1.9			9.1	108		94.0			18
Sat 12	363.74	242.88	0.00	10.93		231.95	231.95	7.6		7.5	302			6.6	6.6	312			4	4	7.82			0.36	0.36	40.0			0.68	0.68	58.4		2.2			10.7	93		107.0			13
Sun 13	365.61	241.22	0.00	10.92		230.30	230.30	7.7		7.6	298			8.4	8.4	332			5	5	7.02			0.38	0.38	34.8			1.05	1.05	59.4		2.7			10.0	95		98.0			12
Mon 14	348.07	249.84	0.00	10.82		239.02	239.02	7.7		7.5	308			10.5	10.5	320			5	5	7.33			0.45	0.45	39.8			0.87	0.87	55.8		2.7			9.9	120		102.0			5
Tue 15	352.21	248.13	0.00	10.82		237.31	237.31	7.5		7.6	310			8.7	8.7	348			3	3	6.25			0.55	0.55	37.9			0.21	0.21	53.1		2.0			9.4	105		113.0			3
Wed 16	337.97	247.03	0.00	11.08		235.95	235.95	7.6		7.5	294			6.1	6.1	422			3	3	7.30			0.32	0.32	38.9			0.25	0.25	59.8		1.7			9.7	99		109.0	2.7		6
Thu 17	342.83	246.88	0.00	11.22		235.66	235.66	7.6		7.6	330			5.6	5.6	322			2	2	7.29			0.35	0.35	37.2			0.26	0.26	54.6		1.9			9.7	105		110.0			3
Fri 18	335.48	241.56	0.00	10.87		230.69	230.69	7.5		7.6	336			10.2	10.2	397			4	4	7.67			0.79	0.79	37.3			0.41	0.41	58.6		2.6			11.1	96		110.0			7
Sat 19	360.18	242.01	0.00	11.05		230.96	230.96	7.6		7.6	272			12.9	12.9	340			5	5	7.41			0.64	0.64	39.0			0.95	0.95	58.2		3.1			9.8	90		106.0			2
Sun 20	364.70	239.75	0.00	10.84		228.91	228.91	7.7		7.6	240			10.7	10.7	334			4	4	6.83			0.52	0.52	36.7			1.44	1.44	53.2		3.9			8.9	84		95.0			3
Mon 21	351.86	246.54	0.00	10.95		235.59	235.59	7.5		7.5	296			8.9	8.9	338			4	4	7.17			0.50	0.50	31.8			1.25	1.25	55.1		3.2			9.9	98		91.0			4
Tue 22	339.13	244.25	0.00	11.03		233.22	233.22	7.5		7.8	317			6.3	6.3	302			3	3	6.57			0.30	0.30	36.0			1.21	1.21	52.6		2.9			8.8	98		102.0	1.6		10
Wed 23	353.36	243.75	0.00	11.11		232.64	232.64	7.6		7.6	318			4.5	4.5	362			3	3	6.84			0.56	0.56	35.0			0.90	0.90	53.9		2.4			8.4	100		105.0			3
Thu 24	362.25	245.28	0.00	10.48		234.80	234.80	7.5		7.8	272			5.8	5.8	329			3	3	7.12			0.40	0.40	36.6			1.39	1.39	52.8		3.0			7.1	90		103.0			5
Fri 25	331.39	218.76	0.00	10.57		208.19	208.19	7.6		7.7	272			4.2	4.2	329			3	3	6.77			0.33	0.33	41.6			1.81	1.81	47.5		2.8			8.3	76		95.0			2
Sat 26	338.55	218.07	0.00	10.50		207.57	207.57	7.6		7.6	284			4.2	4.2	394			3	3	6.87			0.24	0.24	42.2			1.91	1.91	51.3		3.3			10.1	74		85.0			3
Sun 27	354.51	228.49	0.00	10.53		217.96	217.96	7.6		7.5	260			4.7	4.7	368			3	3	6.82			0.33	0.33	40.5			2.99	2.99	48.6		4.3			10.8	76		80.0			7
Mon 28	361.34	235.55	0.00	10.72		224.83	224.83	7.5		7.5	294			9.2	9.2	320			3	3	7.74			0.37	0.37	36.4			2.52	2.52	55.7		4.1			9.6	81		79.0			6
Tue 29	359.05	238.70	0.00	10.62		228.08	228.08	7.7		7.6	290			4.8	4.8	327			3	3	7.56			0.36	0.36	37.5			1.45	1.45	54.8		3.83			8.8	89		86.0			20
Wed 30	356.57	237.05	0.00	10.32		226.73	226.73	7.5		7.6	280			8.2	8.2	334			3	3	7.92			0.46	0.46	35.9			1.82	1.82	55.9		3.96			7.5	94		93.0			7
Thu 31	375.18	246.96	0.00	10.08		236.88	236.88	7.5		7.6	254			3.5	3.5	283			3	3	7.11			0.30	0.30	27.8			2.08	2.08	52.6		3.55			6.6	91		96.0			4
Average	351.18	242.66	0.00	10.53	---	232.13	232.13	7.6	---	7.6	292	---	---	6.19	6.19	334	---	---	3	3	7.10	---	---	0.37	0.37	37.5	---	---	1.05	54.8	---	2.71	---	---	9.2	90	---	95	---	---	---
Minimum	331.39	218.07	0.00	8.42	0.00	207.57	207.57	7.4	---	7.5	240	-	---	3.1	3.1	202	---	---	2	2	6.25	-	---	0.21	0.21	27.8	---	---	0.17	47.5	---	1.64	---	---	6.60	72	---	78	1.60	---	2
Maximum	376.60	254.51	0.00	12.06	0.00	245.27	245.27	7.7	---	7.9	336	---	---	12.9	12.9	422	---	---	5	5	8.0	---	---	0.79	0.79	42.2	---	---	2.99	60.0	---	4.28	---	---	11.1	120	---	113	2.70	---	20
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2.08	---	5
TOTAL	---	7,522	0	326	0	7,196	7,196	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

* contact

! The values in EPE (flow) column indicate wet weather events, then the OUT FAL 10 Average calculation exclude numbers for that day (grey/italics)

x - analysis performed at an ISO 17025 Accredited external laboratory.

Enhanced Primary Treatment (EPT) Usage					
Total Bypass (hrs)	EPT Usage (hrs)	% Usage	Total Bypass YTD (hrs)	EPT Usage YTD (hrs)	% Usage
0	0	100%	438	390	89.00%

Report Comments

AEP Ref #

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 OUTFAL 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-ultraviolet disinfection.
FEC ⇨ Combined pre - UV disinfection (FE+EPEPS)
OUT FAL 10 ⇨ UV-disinfected, discharged via OUTFAL 10
OUT FAL 20 ⇨ Combined Bypass (RAW + PE + EPE)
OUT FAL 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

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