Gold Bar Wastewater Treatment Plant
Plant Performance Report
October 2015

Digested Sludge: Total Monthly Volume (ML)	62.80

DATE	Peak Flow (MLD)	Volume of Flow (ML): Influent RAW	Effluent, Non UV Disinfected: OUT-FAL30 BYPASS	Effluent, Non UV Disinfected: MPW	Effluent, UV Disinfected: EPEPS	UV Disinfected OUTFAL 10: FEC	UV Disinfected OUTFAL 10: FE	pH@25°C: RAW	pH@25°C: OUT-FAL30	pH@25°C: OUT-FAL10 FEC	TSS (mg/L): RAW	TSS (mg/L): OUT-FAL30	TSS (mg/L): EPEPS	TSS (mg/L): OUTFAL 10 FEC	TSS (mg/L): OUTFAL 10 FE	BOD_5/$cBOD_5$ (mg/L): RAW BOD_5	BOD_5/$cBOD_5$ (mg/L): OUT-FAL30 BOD_5	BOD_5/$cBOD_5$ (mg/L): EPEPS $cBOD_5$	BOD_5/$cBOD_5$ (mg/L): OUTFAL 10 FEC $cBOD_5$	BOD_5/$cBOD_5$ (mg/L): OUTFAL 10 FE $cBOD_5$	TP (mg/L): RAW	TP (mg/L): OUT-FAL30	TP (mg/L): EPEPS	TP (mg/L): OUTFAL 10 FEC	TP (mg/L): OUTFAL 10 FE	NH3-N (mg/L): RAW	NH3-N (mg/L): OUT-FAL30	NH3-N (mg/L): EPEPS	NH3-N (mg/L): OUTFAL 10 FEC	NH3-N (mg/L): OUTFAL 10 FE	TKN (mg/L): RAW	TKN (mg/L): OUT-FAL30	TKN (mg/L): OUT-FAL10 FEC	NO_2+NO_3 (mg/L): RAW	NO_2+NO_3 (mg/L): OUT-FAL30	NO_2+NO_3 (mg/L): OUT-FAL10 FEC	Chloride (mg/L): RAW	Chloride (mg/L): OUT-FAL30	Chloride (mg/L): OUT-FAL10 FEC	E. coli (Counts/100 mL): RAW X10^6	E. coli (Counts/100 mL): OUT-FAL30 X10^6	E. coli (Counts/100 mL): OUT-FAL10 FEC
Thu 01	341.02	255.76	0.00	10.93		244.83	244.83	7.6		7.5	322			4.1	4.1	337			3.0	3.0	6.34			0.31	0.31	36.2			0.31	0.31	52.4		1.76			9.0	69		76			3
Fri 02	344.89	256.79	0.00	10.18		246.61	246.61	7.5		7.5	288			4.3	4.3	298			3.0	3.0	7.69			0.26	0.26	32.2			0.24	0.24	52.2		1.66			8.7	70		75			2
Sat 03	375.26	270.37	0.00	9.50		260.87	260.87	7.6		7.4	412			5.3	5.3	285			3.0	3.0	5.94			0.29	0.29	32.5			0.59	0.59	48.1		2.12			8.4	75		79			5
Sun 04	381.69	257.36	0.00	10.49		246.87	246.87	7.6		7.5	302			5.0	5.0	310			3.0	3.0	6.32			0.28	0.28	35.8			0.95	0.95	50.5		2.43			9.3	74		80			4
Mon 05	360.79	259.51	0.00	9.86		249.65	249.65	7.5		7.5	305			4.5	4.5	275			3.0	3.0	5.98			0.28	0.28	32.1			0.45	0.45	46.5		1.93			8.7	70		77			8
Tue 06	352.75	254.80	0.00	10.39		244.41	244.41	7.6		7.4	312			5.0	5.0	274			3.0	3.0	6.36			0.26	0.26	35.7			0.24	0.24	50.4		1.70			10.1	76		81			3
Wed 07	348.69	254.31	0.00	10.30		244.01	244.01	7.6		7.6	285			4.3	4.3	322			5.0	5.0	6.40			0.27	0.27	34.1			0.32	0.32	50.2		1.86			8.7	77		81			3
Thu 08	349.94	254.91	0.00	10.46		244.45	244.45	7.6		7.6	358			4.6	4.6	307			4.0	4.0	6.77			0.27	0.27	33.1			0.16	0.16	53.6		1.60			8.5	70		80			4
Fri 09	357.91	257.89	0.00	9.61		248.28	248.28	7.6		7.6	368			5.0	5.0	351			4.0	4.0	6.47			0.24	0.24	35.6			0.13	0.13	52.6		1.60			8.9	71		77			1
Sat 10	369.13	250.34	0.00	10.25		240.09	240.09	7.6		7.7	244			4.8	4.8	281			5.0	5.0	6.88			0.28	0.28	33.6			0.40	0.40	50.9		1.98			10.3	71		81			2
Sun 11	493.64	274.54	4.99	10.38		259.17	259.17	7.5		7.5	412			5.2	5.2	302			4.0	4.0	8.30			0.28	0.28	32.6			0.35	0.35	66.5		1.82			10.1	73		77			5
Mon 12	390.00	251.86	0.00	9.54		242.32	242.32	7.6		7.5	286			4.6	4.6	296			3.0	3.0	8.85			0.39	0.39	35.0			0.81	0.81	65.5		2.33			9.2	66		72			4
Tue 13	354.18	254.00	0.00	9.91		244.09	244.09	7.7		7.6	298			4.0	4.0	293			3.0	3.0	5.95			0.25	0.25	33.3			0.56	0.56	50.9		1.96			9.6	69		71			7
Wed 14	348.67	252.25	0.00	10.66		241.59	241.59	7.5		7.4	320			5.2	5.2	268			3.0	3.0	6.80			0.42	0.42	37.1			0.16	0.16	54.5		1.99			10.6	74		80			3
Thu 15	348.30	252.91	0.00	11.20		241.71	241.71	7.6		7.3	348			6.2	6.2	301			4.0	4.0	6.92			0.31	0.31	31.8			0.24	0.24	53.3		1.88			11.4	71		79			6
Fri 16	352.87	254.27	0.00	11.14		243.13	243.13	7.6		7.4	286			6.1	6.1	308			4.0	4.0	6.77			0.44	0.44	35.7			0.26	0.26	50.8		1.84			11.2	71		78			4
Sat 17	370.72	248.87	0.00	10.02		238.85	238.85	7.6		7.6	272			5.2	5.2	273			3.0	3.0	6.66			0.31	0.31	37.9			0.60	0.60	50.3		2.22			10.7	69		80			2
Sun 18	443.45	250.06	0.00	10.10		239.96	239.96	7.6		7.6	271			4.1	4.1	294			3.0	3.0	6.63			0.23	0.23	35.2			0.69	0.69	57.5		2.59			10.8	69		74			1
Mon 19	347.99	255.49	0.00	10.21		245.28	245.28	7.6		7.6	315			4.8	4.8	286			2.0	2.0	6.48			0.27	0.27	36.1			0.37	0.37	54.8		2.03			9.3	75		73			7
Tue 20	343.50	260.93	0.00	3.73		257.20	257.20	7.6		7.5	312			3.0	3.0	347			2.0	2.0	6.82			0.30	0.30	30.5			0.19	0.19	49.0		1.83			9.6	74		79			4
Wed 21	354.08	253.80	0.00	10.24		243.56	243.56	7.5		7.6	288			3.2	3.2	262			2.0	2.0	6.73			0.21	0.21	35.1			0.18	0.18	55.4		1.69			9.6	72		77			1
Thu 22	347.27	252.17	0.00	9.37		242.80	242.80	7.5		7.5	300			3.3	3.3	* 232			2.0	2.0	6.86			0.22	0.22	33.3			0.13	0.13	55.4		1.61			9.8	70		80			1
Fri 23	353.08	247.00	0.00	9.02		237.98	237.98	7.6		7.6	290			2.8	2.8	260			2.0	2.0	6.51			0.25	0.25	36.7			0.32	0.32	56.5		1.74			9.5	73		77			4
Sat 24	427.23	243.48	0.00	9.16		234.32	234.32	7.6		7.7	320			2.7	2.7	337			2.0	2.0	7.33			0.20	0.20	37.1			0.75	0.75	59.1		2.08			11.0	66		73			4
Sun 25	455.36	248.65	0.00	10.49		238.16	238.16	7.6		7.7	276			2.2	2.2	286			2.0	2.0	6.79			0.21	0.21	33.8			1.08	1.08	57.9		3.39			10.7	63		69			2
Mon 26	569.48	280.94	25.67	10.30		244.97	244.97	7.7	7.5	7.4	432	56.0		2.5	2.5	330	100		2.0	2.0	6.75	2.96		0.28	0.28	29.0	22.1		0.85	0.85	52.9	35.9	3.98		0.982	10.8	75	78	70		1.0	2
Tue 27	376.32	249.49	0.00	9.62		239.87	239.87	7.6		7.4	289			2.7	2.7	263			2.0	2.0	6.11			0.20	0.20	33.9			0.37	0.37	69.7		2.44			9.5	70		71			3
Wed 28	350.97	248.62	0.00	11.26		237.36	237.36	7.6		7.4	395			3.2	3.2	308			3.0	3.0	7.05			0.26	0.26	32.7			0.87	0.87	53.5		2.34			10.2	70		73	1.30		6
Thu 29	349.18	263.08	0.00	11.14		251.94	251.94	7.5		7.4	320			3.5	3.5	295			2.0	2.0	7.98			0.31	0.31	37.0			1.26	1.26	56.2		2.88			10.6	78		74	1.60		8
Fri 30	397.87	266.63	0.00	10.75		255.88	255.88	7.6		7.5	320			3.4	3.4	296			3.0	3.0	6.94			0.32	0.32	33.6			1.00	1.00	53.0		2.73			8.6	83		82			6
Sat 31	568.42	266.73	12.81	10.06		243.86	243.86	7.5		7.4	290			2.9	2.9	300			3.0	3.0	7.72			0.28	0.28	30.1			0.75	0.75	51.8		2.48			8.1	63		84			15
Average	384.67	256.38	1.40	10.01	---	244.97	244.97	7.6	7.5	7.5	317	56.0	--- ---	4.12	4.12	296	100	---	3.0	3.0	6.84	2.96	--- ---	0.28	0.28	34.1	22.1	--- ---	0.50	0.50	54.3	35.9	2.14	---	0.98	9.7	72	78	77	---	---	---
Minimum	341.02	243.48	0.00	3.73	0.00	234.32	234.32	7.5	7.5	7.3	244	56.0	--- ---	2.2	2.2	232	100	---	2.0	2.0	5.94	2.96	--- ---	0.20	0.20	29.0	22.1	--- ---	0.13	0.13	46.5	35.9	1.60	---	0.98	8.1	63	78	69	1.30	1.0	1
Maximum	569.48	280.94	25.67	11.26	0.00	260.87	260.87	7.7	7.5	7.7	432	56.0	--- ---	6.2	6.2	351	100	---	5.0	5.0	8.85	2.96	--- ---	0.44	0.44	37.9	22.1	--- ---	1.26	1.26	69.7	35.9	3.98	---	0.98	11.4	83	78	84	1.60	1.0	15
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	--- ---	---	---	---	---	---	---	---	---	---	--- ---	---	---	---	---	--- ---		---	---	---	---	---	---	---	---	---	---	1.44	1.0	3
TOTAL	---	7,948	43.47	310.27	0.00	7,594	7,594	---	---	---	---	---	--- ---	---	---	---	---	---	---	---	---	---	--- ---	---	---	---	---	--- ---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

* 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
6	6	100%	434	386	88.90%

Report Comments

AEP Ref #

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

Abhishek Bhargava 02/24/2016 (mm/dd/yyyy)

Debra Long 02/24/2016 (mm/dd/yyyy)

Report was originally issued on December 02, 2015. It was reissued on February 24, 2016 due to an error which excluded October 31 data from calculations of totals, minimum, average and maximum.