PROVIDING MORE EPCOR

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

Digested Sludge: Total Monthly Volume (ML)	61.28

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent	Effluent				
			Non UV Disinfected			UV Disinfected	
		RAW	OUT-FAL30 BYPASS	MPW	EPEPS	OUTFAL 10 FEC	OUTFAL 10 FE
Sun 01	542.94	283.19	8.51	11.51		263.17	263.17
Mon 02	386.33	290.46	0.00	10.77		279.69	279.69
Tue 03	396.62	267.31	0.00	11.07		256.24	256.24
Wed 04	353.88	252.42	0.00	11.33		241.09	241.09
Thu 05	349.63	252.74	0.00	11.11		241.63	241.63
Fri 06	353.91	247.18	0.00	10.50		236.68	236.68
Sat 07	375.01	245.69	0.00	10.50		235.19	235.19
Sun 08	493.42	273.73	23.98	10.53		239.22	239.22
Mon 09	370.87	274.43	0.05	10.97		263.41	263.41
Tue 10	343.74	250.42	0.00	10.26		240.16	240.16
Wed 11	364.53	244.06	0.00	11.24		232.82	232.82
Thu 12	351.31	250.88	0.00	10.33		240.55	240.55
Fri 13	353.92	251.44	0.00	10.38		241.06	241.06
Sat 14	368.10	246.44	0.00	9.92		236.52	236.52
Sun 15	379.31	248.33	0.00	10.67		237.66	237.66
Mon 16	347.60	252.13	0.00	10.44		241.69	241.69
Tue 17	347.16	250.04	0.00	9.94		240.10	240.10
Wed 18	349.86	254.59	0.00	9.92		244.67	244.67
Thu 19	340.45	248.90	0.00	10.05		238.85	238.85
Fri 20	355.51	252.01	0.00	9.86		242.15	242.15
Sat 21	376.18	247.69	0.00	10.08		237.61	237.61
Sun 22	389.01	249.85	0.00	10.08		239.77	239.77
Mon 23	350.74	254.81	0.00	11.18		243.63	243.63
Tue 24	341.43	248.82	0.00	10.63		238.19	238.19
Wed 25	337.95	250.47	0.00	10.11		240.36	240.36
Thu 26	340.96	244.86	0.00	10.33		234.53	234.53
Fri 27	347.03	244.91	0.00	9.99		234.92	234.92
Sat 28	365.91	243.94	0.00	10.27		233.67	233.67
Sun 29	378.34	245.31	0.00	11.01		234.30	234.30
Mon 30	350.00	252.18	0.00	11.62		240.56	240.56
Average	370.06	253.97	1.08	10.55	---	242.34	242.34
Minimum	337.95	243.94	0.00	9.86	0.00	232.82	232.82
Maximum	542.94	290.46	23.98	11.62	0.00	279.69	279.69
GeoMean	---	---	---	---	---	---	---
TOTAL	---	7,619	32.54	316.60	0.00	7,270	7,270

Liquid Stream Quality

DATE	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)		
	RAW	OUT-FAL30	OUT-FAL10 FEC	RAW	OUT-FAL30	EPEPS	OUTFAL 10 FEC	OUTFAL 10 FE	RAW BOD$_5$	OUT-FAL30 BOD$_5$	EPEPS cBOD$_5$	OUTFAL 10 FEC cBOD$_5$	OUTFAL 10 FE cBOD$_5$	RAW	OUT-FAL30	EPEPS	OUTFAL 10 FEC	OUTFAL 10 FE	RAW	OUT-FAL30	EPEPS	OUTFAL 10 FEC	OUTFAL 10 FE	RAW	OUT-FAL30	OUT-FAL10 FEC	RAW	OUT-FAL30	OUT-FAL10 FEC	RAW	OUT-FAL30	OUT-FAL10 FEC	RAW X10^6	OUT-FAL30 X10^6	OUT-FAL10 FEC
Sun 01	7.4	-	7.3	300	-		3.1	3.1	272	-		3.0	3.0	5.54	-		0.19	0.19	27.9	-		0.9	0.93	49.0	-			-	7.5	62	-	69		-	1
Mon 02	7.6	-	7.5	280	-		3.2	3.2	264	-		3.0	3.0	5.13	-		0.32	0.32	29.8	-		0.68	0.68	44.2	-	2.3		-	7.6	61	-	68		-	7
Tue 03	7.7	-	7.5	296	-		4.1	4.1	332	-		2.0	2.0	5.71	-		3.22	3.22	32.6	-		0.49	0.49	47.9	-	2.0		-	7.2	70	-	66		-	3
Wed 04	7.6	-	7.5	354	-		3.6	3.6	296	-		< 2.0	2.0	6.72	-		0.24	0.24	34.8	-		0.68	0.68	52.3	-	2.1		-	6.9	70	-	76		-	4
Thu 05	7.6	-	7.5	306	-		3.6	3.6	291	-		< 2.0	2.0	6.46	-		0.30	0.30	34.0	-		0.44	0.44	51.3	-	2.0		-	8.0	78	-	75		-	7
Fri 06	7.5	-	7.5	332	-		3.1	3.1	307	-		< 2.0	2.0	6.36	-		0.25	0.25	30.3	-		0.29	0.29	50.9	-	1.8		-	9.1	71	-	75		-	3
Sat 07	7.6	-	7.6	333	-		3.5	3.5	360	-		< 2.0	2.0	6.38	-		0.19	0.19	29.5	-		0.40	0.40	51.2	-	1.8		-	8.0	68	-	82		-	2
Sun 08	7.6	7.6	7.5	380	52.0		3.3	3.3	376	124		2.0	2.0	5.93	2.26		0.21	0.21	33.2	25.2		0.48	0.48	49.9	33.8	1.8		1.34	7.9	79	83.0	72		2.55	4
Mon 09	7.6	-	7.5	296	-		4.4	4.4	268	-		2.0	2.0	5.42	-		0.22	0.22	31.8	-		0.30	0.30	45.0	-	1.4		-	8.6	73	-	77		-	2
Tue 10	7.5	-	7.6	356	-		3.4	3.4	360	-		3.0	3.0	7.02	-		0.29	0.29	35.3	-		0.12	0.12	50.0	-	1.3		-	9.3	72	-	76		-	3
Wed 11	7.5	-	7.6	378	-		3.5	3.5	300	-		2.0	2.0	6.79	-		0.20	0.20	37.2	-		0.41	0.41	55.4	-	1.7		-	8.8	65	-	76		-	2
Thu 12	7.5	-	7.6	354	-		4.2	4.2	296	-		2.0	2.0	6.56	-		0.26	0.26	34.1	-		0.35	0.35	53.6	-	1.8		-	8.9	73	-	73		-	4
Fri 13	7.5	-	7.5	358	-		4.5	4.5	331	-		< 2.0	2.0	6.47	-		0.28	0.28	37.0	-		0.14	0.14	54.2	-	1.7		-	9.0	71	-	78		-	6
Sat 14	7.6	-	7.4	304	-		4.2	4.2	310	-		2.0	2.0	6.42	-		0.24	0.24	37.5	-		0.41	0.41	54.1	-	1.8		-	9.0	68	-	79		-	4
Sun 15	7.6	-	7.5	308	-		3.7	3.7	302	-		2.0	2.0	5.86	-		0.30	0.30	38.0	-		0.59	0.59	50.6	-	2.0		-	8.9	70	-	74		-	6
Mon 16	7.5	-	7.5	320	-		3.8	3.8	312	-		< 2.0	2.0	6.09	-		0.20	0.20	37.4	-		0.33	0.33	52.2	-	1.7		-	9.3	71	-	72		-	3
Tue 17	7.7	-	7.5	306	-		3.1	3.1	317	-		2.0	2.0	6.24	-		0.18	0.18	29.1	-		0.10	0.10	51.8	-	1.3		-	9.3	71	-	76		-	4
Wed 18	7.5	-	7.6	311	-		2.2	2.2	287	-		2.0	2.0	6.80	-		0.21	0.21	35.3	-		0.10	0.10	51.9	-	1.5		-	8.8	75	-	76		-	2
Thu 19	7.7	-	7.7	278	-		3.8	3.8	318	-		3.0	3.0	6.70	-		0.20	0.20	36.8	-		0.29	0.29	54.7	-	1.7		-	9.2	76	-	79		-	3
Fri 20	7.7	-	7.6	285	-		3.7	3.7	301	-		3.0	3.0	7.94	-		0.29	0.29	37.0	-		0.37	0.37	54.9	-	1.9		-	9.1	72	-	77		-	5
Sat 21	7.7	-	7.6	278	-		4.6	4.6	334	-		3.0	3.0	7.09	-		0.22	0.22	34.4	-		0.93	0.93	58.1	-	2.6		-	8.6	67	-	74		-	< 1
Sun 22	7.6	-	7.6	262	-		4.6	4.6	317	-		3.0	3.0	7.10	-		0.25	0.25	39.2	-		1.77	1.77	60.1	-	3.3		-	10.6	66	-	71		-	2
Mon 23	7.6	-	7.6	304	-		6.2	6.2	323	-		3.0	3.0	6.74	-		0.29	0.29	32.4	-		1.48	1.48	55.1	-	3.1		-	10.6	76	-	71		-	3
Tue 24	7.5	-	7.5	286	-		5.3	5.3	311	-		3.0	3.0	7.96	-		0.36	0.36	37.5	-		0.86	0.86	58.9	-	2.6		-	11.6	90	-	85		-	3
Wed 25	7.5	-	7.5	290	-		5.4	5.4	337	-		2.0	2.0	6.82	-		0.28	0.28	35.8	-		0.80	0.80	54.3	-	1.9		-	10.5	93	-	99	2.20	-	3
Thu 26	7.6	-	7.6	306	-		4.8	4.8	305	-		3.0	3.0	7.15	-		0.29	0.29	29.8	-		0.22	0.22	54.1	-	1.6		-	8.9	79	-	91	-	-	2
Fri 27	7.6	-	7.6	263	-		4.5	4.5	305	-		3.0	3.0	6.97	-		0.25	0.25	31.4	-		0.27	0.27	57.2	-	1.8		-	9.1	87	-	95	-	-	2
Sat 28	7.6	-	7.5	314	-		5.6	5.6	330	-		3.0	3.0	5.29	-		0.27	0.27	36.5	-		0.54	0.54	43.4	-	2.2		-	9.2	73	-	92	-	-	3
Sun 29	7.7	-	7.6	272	-		4.7	4.7	336	-		3.0	3.0	6.37	-		0.24	0.24	35.3	-		0.53	0.53	55.1	-	2.10		-	9.5	73	-	82	-	-	5
Mon 30	7.7	-	7.5	292	-		5.3	5.3	328	-		3.0	3.0	6.18	-		0.23	0.23	35.9	-		0.17	0.17	51.9	-	1.69		-	8.7	83	-	79	1.70	-	1
Average	7.6	7.6	7.5	310	52.0	---	4.10	4.10	314	124	---	2.5	2.5	6.47	2.26	---	0.35	0.35	34.2	25.2	---	0.52	52.4	33.8	1.95	---	1.34	8.9	73	83	78	---	---	---
Minimum	7.4	7.6	7.3	262	52.0	---	2.2	2.2	264	124	---	< 2.0	2.0	5.13	2.26	---	0.18	0.18	27.9	25.2	---	0.10	43.4	33.8	1.32	---	1.34	6.90	61	83	66	1.70	2.6	< 1
Maximum	7.7	7.6	7.7	380	52.0	---	6.2	6.2	376	124	---	3.0	3.0	8.0	2.26	---	3.22	3.22	39.2	25.2	---	1.77	60.1	33.8	3.29	---	1.34	11.6	93	83	99	2.20	2.6	7
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.93	2.6	3
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

* 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)	%
4	4	100%	438	390	89%

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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12/22/2015 (mm/dd/yyyy)

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12/21/2015 (mm/dd/yyyy)