PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
January 2019

Digested Sludge: Total Monthly Volume (ML)	65.59

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent RAW	Effluent Non UV Disinfected OUTFALL30	Effluent Non UV Disinfected MPW	Effluent Non UV Disinfected OUTFALL20	Effluent UV Disinfected EPEPS	Effluent UV Disinfected OUTFALL10 FEC	Effluent UV Disinfected OUTFALL10 FE
Tue 01	318.5	234.0	0.0	10.2	0.0	0.0	223.8	223.8
Wed 02	374.3	251.8	0.0	10.2	0.0	0.0	241.6	241.6
Thu 03	368.6	262.7	0.0	10.5	0.0	0.0	252.2	252.2
Fri 04	320.7	252.1	0.0	11.5	0.0	0.0	240.6	240.6
Sat 05	306.8	236.8	0.0	11.7	0.0	0.0	225.1	225.1
Sun 06	319.8	240.3	0.0	11.4	0.0	0.0	228.9	228.9
Mon 07	320.9	248.3	0.0	11.9	0.0	0.0	236.4	236.4
Tue 08	304.7	240.6	0.0	11.6	0.0	0.0	229.0	229.0
Wed 09	318.5	243.5	0.0	11.5	0.0	0.0	232.0	232.0
Thu 10	335.2	239.9	0.0	11.5	0.0	0.0	228.4	228.4
Fri 11	329.9	243.2	0.0	11.6	0.0	0.0	231.6	231.6
Sat 12	334.1	240.4	0.0	11.6	0.0	0.0	228.8	228.8
Sun 13	358.2	240.5	0.0	11.4	0.0	0.0	229.1	229.1
Mon 14	333.1	249.6	0.0	11.6	0.0	0.0	238.0	238.0
Tue 15	331.7	246.4	0.0	11.9	0.0	0.0	234.5	234.5
Wed 16	331.4	243.0	0.0	11.4	0.0	0.0	231.6	231.6
Thu 17	333.9	242.3	0.0	10.9	0.0	0.0	231.4	231.4
Fri 18	329.9	243.6	0.0	12.2	0.0	0.0	231.4	231.4
Sat 19	345.5	249.3	0.0	13.0	0.0	0.0	236.3	236.3
Sun 20	353.1	246.1	0.0	12.9	0.0	0.0	233.2	233.2
Mon 21	340.4	246.6	0.0	13.0	0.0	0.0	233.6	233.6
Tue 22	336.8	246.6	0.0	13.1	0.0	0.0	233.5	233.5
Wed 23	337.3	247.2	0.0	13.0	0.0	0.0	234.2	234.2
Thu 24	332.5	248.5	0.0	12.9	0.0	0.0	235.6	235.6
Fri 25	325.9	247.8	0.0	12.9	0.0	0.0	234.9	234.9
Sat 26	447.6	280.9	9.7	13.2	0.0	0.0	258.0	258.0
Sun 27	418.0	332.9	0.0	12.7	0.0	0.0	320.2	320.2
Mon 28	342.2	254.9	0.0	12.1	0.0	0.0	242.8	242.8
Tue 29	336.1	247.0	0.0	12.3	0.0	0.0	234.7	234.7
Wed 30	334.4	243.8	0.0	12.6	0.0	0.0	231.2	231.2
Thu 31	346.1	258.7	0.0	12.4	0.0	0.0	246.3	246.3
Average	340.84	249.98	0.31	11.96	0.00	0.00	237.71	237.71
Minimum	304.70	234.00	0.00	10.20	0.00	0.00	223.80	223.80
Maximum	447.60	332.90	9.70	13.20	0.00	0.00	320.20	320.20
GeoMean	---	---	---	---	---	---	---	---
TOTAL	---	7,749	10	371	0.00	0	7,369	7,369

Liquid Stream Quality

DATE	pH@25°C RAW	pH@25°C OUTFALL30	pH@25°C OUTFALL20	pH@25°C OUTFALL10 FEC	TSS (mg/L) RAW	TSS (mg/L) OUTFALL30	TSS (mg/L) OUTFALL20	TSS (mg/L) EPEPS	TSS (mg/L) OUTFALL10 FEC	TSS (mg/L) OUTFALL10 FE
Tue 01	7.6			7.5	344				4.4	4.4
Wed 02	7.4			7.6	396				5.5	5.5
Thu 03	7.6			7.6	343				6.2	6.2
Fri 04	7.5			7.5	406				5.2	5.2
Sat 05	7.4			7.6	416				5.4	5.4
Sun 06	7.5			7.6	344				4.7	4.7
Mon 07	7.6			7.5	316				6.3	6.3
Tue 08	7.6			7.7	308				5.1	5.1
Wed 09	7.5			7.5	312				5.8	5.8
Thu 10	7.5			7.5	336				3.7	3.7
Fri 11	7.5			7.5	360				5.1	5.1
Sat 12	7.3			7.5	332				4.0	4.0
Sun 13	7.4			7.5	648				4.4	4.4
Mon 14	7.4			7.5	300				5.6	5.6
Tue 15	7.5			7.5	336				4.5	4.5
Wed 16	7.5			7.5	372				4.9	4.9
Thu 17	7.5			7.5	304				5.2	5.2
Fri 18	7.5			7.5	324				4.6	4.6
Sat 19	7.6			7.5	340				7.3	7.3
Sun 20	7.6			7.6	312				5.2	5.2
Mon 21	7.5			7.6	340				4.7	4.7
Tue 22	7.5			7.6	300				4.9	4.9
Wed 23	7.6			7.5	345				4.5	4.5
Thu 24	7.6			7.6	246				4.8	4.8
Fri 25	7.6			7.6	332				6.5	6.5
Sat 26	7.5	7.5		7.5	400	240			4.9	4.9
Sun 27	7.5			7.4	310				4.6	4.6
Mon 28	7.6			7.5	328				4.8	4.8
Tue 29	7.6			7.6	296				4.2	4.2
Wed 30	7.6			7.6	372				4.5	4.5
Thu 31	7.5			7.5	392				6.3	6.3
Average	7.5	7.5	---	7.5	349	240	---	---	5.1	5.1
Minimum	7.3	7.5	---	7.4	246	240	---	---	3.7	3.7
Maximum	7.6	7.5	---	7.7	648	240	---	---	7.3	7.3
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	$BOD_5/cBOD_5$ (mg/L) RAW BOD_5	BOD_5 OUTFALL30 BOD_5	BOD_5 OUTFALL20 BOD_5	BOD_5 EPEPS BOD_5	BOD_5 OUTFALL10 FEC $cBOD_5$	BOD_5 OUTFALL10 FE $cBOD_5$	TP (mg/L) RAW	TP OUTFALL30	TP OUTFALL20	TP EPEPS	TP OUTFALL10 FEC	TP OUTFALL10 FE
Tue 01	396				4	4	7.04				0.28	0.28
Wed 02	334				4	4	8.15				0.29	0.29
Thu 03	317				4	4	8.04				0.32	0.32
Fri 04	422				4	4	7.30				0.32	0.32
Sat 05	454				3	3	7.06				0.30	0.30
Sun 06	325				3	3	7.02				0.24	0.24
Mon 07	349				4	4	6.44				0.29	0.29
Tue 08	306				4	4	7.09				0.32	0.32
Wed 09	302				3	3	6.86				0.37	0.37
Thu 10	329				3	3	6.67				0.32	0.32
Fri 11	275				3	3	6.99				0.30	0.30
Sat 12	296				3	3	7.02				0.28	0.28
Sun 13	367				3	3	8.11				0.26	0.26
Mon 14	274				3	3	6.75				0.27	0.27
Tue 15	410				4	4	7.07				0.28	0.28
Wed 16	314				3	3	7.59				0.32	0.32
Thu 17	348				3	3	7.39				0.32	0.32
Fri 18	362				4	4	7.07				0.30	0.30
Sat 19	316				4	4	8.20				0.36	0.36
Sun 20	318				4	4	8.54				0.28	0.28
Mon 21	361				4	4	8.45				0.25	0.25
Tue 22	310				4	4	8.48				0.26	0.26
Wed 23	303				3	3	8.74				0.27	0.27
Thu 24	384				4	4	8.46				0.30	0.30
Fri 25	360				5	5	8.52				0.33	0.33
Sat 26	341	271			4	4	8.26	5.98			0.25	0.25
Sun 27	228				3	3	6.20				0.22	0.22
Mon 28	284				3	3	7.94				0.22	0.22
Tue 29	324				4	4	8.40				0.32	0.32
Wed 30	339				4	4	9.13				0.26	0.26
Thu 31	327				4	4	9.70				0.26	0.26
Average	335	271	---	---	3.6	3.6	7.70	5.98	---	---	0.29	0.29
Minimum	228	271	---	---	3	3	6.20	5.98	---	---	0.22	0.22
Maximum	454	271	---	---	5	5	9.70	5.98	---	---	0.37	0.37
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH3-N (mg/L) RAW	NH3-N OUTFALL30	NH3-N OUTFALL20	NH3-N EPEPS	NH3-N OUTFALL10 FEC	NH3-N OUTFALL10 FE	un-ionized NH3-N (mg/L) OUTFAL 30	un-ionized NH3-N OUTFAL 20	un-ionized NH3-N OUTFAL 10	TKN (mg/L) RAW	TKN OUTFALL30	TKN OUTFALL20	TKN OUTFALL10 FEC
Tue 01	38.8				0.74	0.74				53.5			2.27
Wed 02	38.4				1.00	1.00				61.3			2.44
Thu 03	45.3				3.75	3.75				58.4			5.40
Fri 04	33.8				1.91	1.91				55.2			3.69
Sat 05	32.9				0.71	0.71				56.6			2.44
Sun 06	32.9				0.54	0.54				55.9			2.09
Mon 07	36.5				0.64	0.64				53.6			2.25
Tue 08	36.7				0.51	0.51				57.0			2.02
Wed 09	30.7				0.37	0.37				55.8			1.78
Thu 10	34.9				0.52	0.52				52.0			2.04
Fri 11	33.7				0.47	0.47				60.2			2.12
Sat 12	31.2				0.74	0.74				58.4			2.36
Sun 13	38.8				0.79	0.79				62.0			2.54
Mon 14	36.8				0.86	0.86				59.4			2.36
Tue 15	37.2				0.43	0.43				55.9			2.23
Wed 16	36.0				0.74	0.74				62.8			2.68
Thu 17	38.4				0.73	0.73				63.4			2.85
Fri 18	37.0				0.50	0.50				62.0			2.36
Sat 19	34.4				1.06	1.06				66.2			3.59
Sun 20	39.4				2.63	2.63				68.6			4.92
Mon 21	41.4				3.68	3.68				62.6			4.99
Tue 22	42.4				2.14	2.14				61.2			3.78
Wed 23	44.8				2.62	2.62				65.1			4.26
Thu 24	47.8				2.41	2.41				63.2			3.85
Fri 25	42.6				1.50	1.50				62.2			3.35
Sat 26	50.5	42.8			3.54	3.54				58.7	51.9		4.96
Sun 27	32.5				3.97	3.97				49.5			5.40
Mon 28	40.7				2.88	2.88				61.7			4.51
Tue 29	38.4				2.55	2.55				64.0			4.58
Wed 30	39.5				2.20	2.20				69.2			3.92
Thu 31	33.0				1.89	1.89				68.9			3.72
Average	38.0	42.8	---	---	1.58	1.58	---	---	---	60.1	51.9	---	3.28
Minimum	30.7	42.8	---	---	0.37	0.37	---	---	---	49.5	51.9	---	1.78
Maximum	50.5	42.8	---	---	3.97	3.97	---	---	---	69.2	51.9	---	5.40
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NO_2+NO_3 (mg/L) RAW	NO_2+NO_3 OUTFALL30	NO_2+NO_3 OUTFALL20	NO_2+NO_3 OUTFALL10 FEC	Chloride (mg/L) RAW	Chloride OUTFALL30	Chloride OUTFALL20	Chloride OUTFALL10 FEC	*E. coli* (Counts/100 mL) RAW X10^6	*E. coli* OUTFALL30 X10^6	*E. coli* OUTFALL20 X10^6	*E. coli* OUTFALL10 FEC
Tue 01				10.7	130			115				10
Wed 02	< 0.07			10.5	328			151				2
Thu 03				10.3	255			323				23
Fri 04				11.7	164			218				13
Sat 05				10.1	159			179				14
Sun 06				10.1	114			150				9
Mon 07				10.2	123			124				10
Tue 08				10.3	117			126				4
Wed 09	< 0.01			11.5	101			114				15
Thu 10				12.3	97.9			106				5
Fri 11				11.6	100			106				5
Sat 12				10.0	102			110				4
Sun 13				8.46	82.0			98.6				4
Mon 14				8.84	90.9			89.0				10
Tue 15				10.5	94.6			98.0				6
Wed 16	< 0.01			11.0	84.3			96.7				5
Thu 17				9.78	85.5			91.9	2.6			3
Fri 18				11.9	82.9			91.2				7
Sat 19				11.0	82.8			94.8				4
Sun 20				11.1	97.6			87.7				2
Mon 21				11.2	106			94.4			<	1
Tue 22				12.4	104			117				5
Wed 23	0.01			13.0	107			119	2.2			1
Thu 24				11.0	110			111				4
Fri 25				12.3	175			118				1
Sat 26		0.01		11.5	382	521		224		2.5		5
Sun 27				9.54	369			390				4
Mon 28				10.9	125			266				5
Tue 29				10.7	107			155				3
Wed 30	< 0.01			11.3	119			116				5
Thu 31				10.2	278			155				1
Average	0.02	0.01	---	10.8	144	521	---	143	---	---	---	---
Minimum	< 0.01	0.01	---	8.46	82.0	521	---	87.7	2.2	2.5	---	< 1
Maximum	0.07	0.01	---	13.0	382	521	---	390	2.6	2.5	---	23
GeoMean	---	---	---	---	---	---	---	---	2.4	2.5	---	4
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

* Contact Laboratory for information about the quality assurance associated with the result.

Enhanced Primary Treatment (EPT) Usage					
Total Bypass (hrs)	EPT Usage (hrs)	% Usage	Total Bypass YTD (hrs)	EPT Usage YTD (hrs)	% Usage YTD
4	4	100%	4	4	100.00%

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 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). Pre-Ultraviolet disinfection.
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 Litres)
MPN Most Probable Number
NR No result
NS No sample
INS Insufficient sample

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