PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
January 2018

Digested Sludge: Total Monthly Volume (ML)	65.01

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
Mon 01	367.17	234.58	0.00	12.03	0.00	0.00	222.55	222.55
Tue 02	353.65	241.41	0.00	11.33	0.00	0.00	230.08	230.08
Wed 03	348.86	239.94	0.00	12.23	0.00	0.00	227.71	227.71
Thu 04	329.84	240.73	0.00	12.18	0.00	0.00	228.55	228.55
Fri 05	355.11	242.38	0.00	12.12	0.00	0.00	230.26	230.26
Sat 06	325.29	239.45	0.00	11.15	0.00	0.00	228.30	228.30
Sun 07	336.72	240.30	0.00	10.88	0.00	0.00	229.42	229.42
Mon 08	341.75	243.38	0.00	10.73	0.00	0.00	232.65	232.65
Tue 09	309.10	238.45	0.00	10.48	0.00	0.00	227.97	227.97
Wed 10	310.17	238.57	0.00	10.60	0.00	0.00	227.97	227.97
Thu 11	322.72	238.70	0.00	11.70	0.00	0.00	227.00	227.00
Fri 12	318.70	240.21	0.00	11.97	0.00	0.00	228.24	228.24
Sat 13	326.65	235.85	0.00	11.53	0.00	0.00	224.32	224.32
Sun 14	338.22	239.46	0.00	11.49	0.00	0.00	227.97	227.97
Mon 15	344.93	243.39	0.00	11.46	0.00	0.00	231.93	231.93
Tue 16	360.28	239.25	0.00	11.67	0.00	0.00	227.58	227.58
Wed 17	328.19	241.31	0.00	11.58	0.00	0.00	229.73	229.73
Thu 18	364.93	237.42	0.00	10.30	0.00	0.00	227.12	227.12
Fri 19	318.85	241.40	0.00	8.78	0.00	0.00	232.62	232.62
Sat 20	319.70	241.71	0.00	7.89	0.00	0.00	233.82	233.82
Sun 21	328.70	238.45	0.00	8.09	0.00	0.00	230.36	230.36
Mon 22	332.05	242.85	0.00	10.06	0.00	0.00	232.79	232.79
Tue 23	311.96	237.76	0.00	9.70	0.00	0.00	228.06	228.06
Wed 24	314.78	239.08	0.00	9.57	0.00	0.00	229.51	229.51
Thu 25	307.33	236.36	0.00	9.77	0.00	0.00	226.59	226.59
Fri 26	346.52	235.45	0.00	9.78	0.00	0.00	225.67	225.67
Sat 27	333.81	233.08	0.00	9.81	0.00	0.00	223.27	223.27
Sun 28	325.38	234.82	0.00	9.82	0.00	0.00	225.00	225.00
Mon 29	341.04	247.52	0.00	8.77	0.00	0.00	238.75	238.75
Tue 30	305.46	238.94	0.00	9.92	0.00	0.00	229.02	229.02
Wed 31	303.32	236.73	0.00	9.74	0.00	0.00	226.99	226.99
Average	331.33	239.32	0.00	10.55	0.00	0.00	228.77	228.77
Minimum	303.32	233.08	0.00	7.89	0.00	0.00	222.55	222.55
Maximum	367.17	247.52	0.00	12.23	0.00	0.00	238.75	238.75
GeoMean	---	---	---	---	---	---	---	---
TOTAL	---	7,419	0	327	0.00	0	7,092	7,092

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 OUTFALL30	TSS OUTFALL20	TSS EPEPS	TSS OUTFALL10 FEC	TSS OUTFALL10 FE
Mon 01	8.0			7.5	440				4.8	4.8
Tue 02	7.5			7.4	284				6.0	6.0
Wed 03	7.5			7.5	280				5.7	5.7
Thu 04	7.6			7.5	312				4.9	4.9
Fri 05	7.7			7.5	311				5.4	5.4
Sat 06	7.5			7.4	326				5.1	5.1
Sun 07	7.6			7.5	324				7.2	7.2
Mon 08	7.6			7.5	336				5.4	5.4
Tue 09	7.6			7.6	346				5.6	5.6
Wed 10	7.6			7.6	337				5.6	5.6
Thu 11	7.6			7.5	336				5.0	5.0
Fri 12	7.6			7.5	364				6.9	6.9
Sat 13	7.6			7.4	360				5.6	5.6
Sun 14	7.5			7.5	352				5.3	5.3
Mon 15	7.5			7.4	288				7.1	7.1
Tue 16	7.5			7.4	308				6.6	6.6
Wed 17	7.5			7.5	314				5.3	5.3
Thu 18	7.5			7.4	340				7.1	7.1
Fri 19	7.5			7.5	456				5.9	5.9
Sat 20	7.6			7.5	356				6.2	6.2
Sun 21	7.5			7.5	336				6.0	6.0
Mon 22	7.5			7.4	280				6.1	6.1
Tue 23	7.5			7.4	260				5.6	5.6
Wed 24	7.6			7.6	336				6.7	6.7
Thu 25	7.6			7.5	336				6.1	6.1
Fri 26	7.6			7.4	236				6.0	6.0
Sat 27	7.6			7.4	308				9.6	9.6
Sun 28	7.7			7.5	317				9.5	9.5
Mon 29	7.7			7.5	344				11.4	11.4
Tue 30	7.6			7.5	268				5.9	5.9
Wed 31	7.5			7.5	376				5.8	5.8
Average	7.6	---	---	7.5	328	---	---	---	6.3	6.3
Minimum	7.5	---	---	7.4	236	---	---	---	4.8	4.8
Maximum	8.0	---	---	7.6	456	---	---	---	11.4	11.4
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	BOD5/cBOD5 (mg/L) RAW BOD5	BOD OUTFALL30 BOD5	BOD OUTFALL20 BOD5	BOD EPEPS BOD5	cBOD OUTFALL10 FEC cBOD5	cBOD OUTFALL10 FE cBOD5	TP (mg/L) RAW	TP OUTFALL30	TP OUTFALL20	TP EPEPS	TP OUTFALL10 FEC	TP OUTFALL10 FE
Mon 01	334				3	3	11.60				0.21	0.21
Tue 02	338				3	3	7.99				0.23	0.23
Wed 03	380				3	3	7.51				0.28	0.28
Thu 04	336				3	3	7.80				0.30	0.30
Fri 05	384				< 2	< 2	7.74				0.31	0.31
Sat 06	342				3	3	7.95				0.30	0.30
Sun 07	332				3	3	7.44				0.29	0.29
Mon 08	331				3	3	6.79				0.29	0.29
Tue 09	291				3	3	7.61				0.28	0.28
Wed 10	338				2	2	7.79				0.29	0.29
Thu 11	327				3	3	7.67				0.30	0.30
Fri 12	386				4	4	8.00				0.32	0.32
Sat 13	296				3	3	7.39				0.29	0.29
Sun 14	378				4	4	8.14				0.31	0.31
Mon 15	325				4	4	6.80				0.33	0.33
Tue 16	380				4	4	6.76				0.31	0.31
Wed 17	344				4	4	6.66				0.31	0.31
Thu 18	310				4	4	6.78				0.30	0.30
Fri 19	322				5	5	7.72				0.28	0.28
Sat 20	303				5	5	7.83				0.27	0.27
Sun 21	320				5	5	7.60				0.28	0.28
Mon 22	322				5	5	7.14				0.29	0.29
Tue 23	382				9	9	7.99				0.30	0.30
Wed 24	268				5	5	8.76				0.33	0.33
Thu 25	340				5	5	9.06				0.36	0.36
Fri 26	388				6	6	9.81				0.37	0.37
Sat 27	458				6	6	9.32				0.42	0.42
Sun 28	311				6	6	8.91				0.43	0.43
Mon 29	322				6	6	8.52				0.42	0.42
Tue 30	305				4	4	8.87				0.33	0.33
Wed 31	360				4	4	9.26				0.32	0.32
Average	268	---	---	---	< 2	< 2	8.04	---	---	---	0.31	0.31
Minimum	236	---	---	---	< 2	< 2	6.66	---	---	---	0.21	0.21
Maximum	458	---	---	---	9	9	11.6	---	---	---	0.43	0.43
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	TKN (mg/L) RAW	TKN OUTFALL30	TKN OUTFALL20	TKN OUTFALL10 FEC	NO2+NO3 (mg/L) RAW	NO2+NO3 OUTFALL30	NO2+NO3 OUTFALL20	NO2+NO3 OUTFALL10 FEC
Mon 01	63.7				6.12	6.12	80.6			7.53	0.04			9.26
Tue 02	43.9				5.25	5.25	67.0			7.12				11.9
Wed 03	41.7				3.23	3.23	61.3			4.98	0.05			9.83
Thu 04	44.5				2.88	2.88	61.0			4.45				9.07
Fri 05	44.9				3.82	3.82	62.4			5.36				9.86
Sat 06	43.6				3.79	3.79	63.7			5.58				9.71
Sun 07	45.6				3.39	3.39	60.9			5.03				10.4
Mon 08	41.2				2.78	2.78	55.6			4.34				9.85
Tue 09	45.5				1.75	1.75	60.5			3.26				11.2
Wed 10	40.4				2.10	2.10	64.0			3.67	0.03			9.44
Thu 11	48.2				2.92	2.92	60.8			4.62				8.99
Fri 12	41.9				2.88	2.88	64.0			5.46				9.12
Sat 13	38.4				2.04	2.04	61.2			4.21				9.10
Sun 14	45.2				2.36	2.36	68.8			4.41				8.72
Mon 15	39.2				2.68	2.68	54.8			4.33				8.33
Tue 16	35.4				0.75	0.75	51.0			2.31				6.84
Wed 17	33.7				0.38	0.38	48.7			1.87	< 0.07			6.33
Thu 18	35.3				0.27	0.27	52.6			1.80				7.02
Fri 19	36.9				0.39	0.39	58.9			1.92				7.61
Sat 20	41.6				1.58	1.58	60.6			3.11				9.66
Sun 21	43.1				2.91	2.91	61.3			4.43				10.2
Mon 22	40.9				2.29	2.29	56.8			4.52				8.00
Tue 23	40.9				2.39	2.39	62.0			4.23				9.11
Wed 24	46.5				2.66	2.66	68.4			4.60	0.02			9.25
Thu 25	46.4				3.24	3.24	66.4			5.46				7.72
Fri 26	43.2				4.57	4.57	68.8			6.54				7.80
Sat 27	44				5.76	5.76	67.1			7.80				8.32
Sun 28	46.9				6.74	6.74	65.5			8.79				7.40
Mon 29	44.1				6.54	6.54	63.0			8.60				6.80
Tue 30	44.3				5.98	5.98	67.4			7.89				7.76
Wed 31	48.2				6.72	6.72	67.3			8.92	1.54			7.53
Average	43.2	---	---	---	3.26	3.26	62.3	---	---	5.07	0.29	---	---	8.78
Minimum	33.7	---	---	---	0.27	0.27	48.7	---	---	1.80	0.02	---	---	6.33
Maximum	63.7	---	---	---	6.74	6.74	80.6	---	---	8.92	1.54	---	---	11.9
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---

DATE	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
Mon 01	96.2			77.1				14
Tue 02	92.4			90.6				9
Wed 03	110			102				21
Thu 04	119			119				6
Fri 05	134			126				6
Sat 06	154			146				9
Sun 07	107			153				14
Mon 08	126			122				13
Tue 09	120			125				6
Wed 10	120			122				4
Thu 11	112			119				4
Fri 12	104			120				8
Sat 13	100			104				20
Sun 14	154			112				24
Mon 15	111			113	3.4			3
Tue 16	124			127				3
Wed 17	426			214				3
Thu 18	320			325				2
Fri 19	284			314				4
Sat 20	184			275				6
Sun 21	119			167				5
Mon 22	121			130				5
Tue 23	115			122				10
Wed 24	111			123				2,400
Thu 25	108			120				14
Fri 26	144			117				10
Sat 27	122			143				21
Sun 28	103			121				3
Mon 29	106			112				12
Tue 30	140			125				6
Wed 31	118			133				15
Average	142	---	---	143	---	---	---	---
Minimum	92.4	---	---	77.1	3.4	---	---	2
Maximum	426	---	---	325	3.4	---	---	2400
GeoMean	---	---	---	---	3.4	---	---	9
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
0	0	100%	0	0	100.00%

Report Comments

1.	Outfall 10 - Jan 02: Analysis of this sample was repeated. The repeat analysis exceeded the recommended holding time for this analyte.
2.	Outfall 10 - Jan 12: Analysis of this sample was repeated. The repeat analysis exceeded the recommended holding time for this analyte.
3.	Outfall 10 - Jan 24: Analysis of this sample was repeated. The repeat analysis exceeded the recommended holding time for this analyte.

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

Abhishek Bhargava
Senior Manager, Operations

Shane Harnish
Senior Manager, Analytical Operations