PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
November 2017

Digested Sludge: Total Monthly Volume (ML)	56.19

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent RAW	Effluent Non UV Disinfected OUTFALL 30	Effluent Non UV Disinfected OUTFALL 20	Effluent Non UV Disinfected MPW	Effluent UV Disinfected EPEPS	Effluent UV Disinfected OUTFALL 10 FEC	Effluent UV Disinfected OUTFALL 10 FE
Wed 01	587.83	318.11	51.54	0.00	10.80	0.00	255.77	255.77
Thu 02	347.23	249.23	0.00	0.00	10.23	0.00	239.00	239.00
Fri 03	338.50	247.20	0.00	0.00	9.93	0.00	237.27	237.27
Sat 04	359.57	244.86	0.00	0.00	10.37	0.00	234.49	234.49
Sun 05	372.45	255.77	0.00	0.00	9.93	0.00	245.84	245.84
Mon 06	342.44	250.22	0.00	0.00	10.73	0.00	239.49	239.49
Tue 07	348.17	244.80	0.00	0.00	10.76	0.00	234.04	234.04
Wed 08	336.54	243.88	0.00	0.00	10.91	0.00	232.97	232.97
Thu 09	324.59	246.08	0.00	0.00	11.18	0.00	234.90	234.90
Fri 10	338.00	248.10	0.00	0.00	11.54	0.00	236.56	236.56
Sat 11	356.81	239.94	0.00	0.00	11.67	0.00	228.27	228.27
Sun 12	343.07	234.60	0.00	0.00	11.32	0.00	223.28	223.28
Mon 13	342.95	242.39	0.00	0.00	11.30	0.00	231.09	231.09
Tue 14	321.56	241.90	0.00	0.00	11.49	0.00	230.41	230.41
Wed 15	323.07	241.54	0.00	0.00	11.19	0.00	230.35	230.35
Thu 16	322.05	245.37	0.00	0.00	11.01	0.00	234.36	234.36
Fri 17	318.39	239.67	0.00	0.00	11.38	0.00	228.29	228.29
Sat 18	350.25	229.38	0.00	0.00	11.28	0.00	218.10	218.10
Sun 19	353.35	242.40	0.00	0.00	11.25	0.00	231.15	231.15
Mon 20	334.09	243.65	0.00	0.00	11.16	0.00	232.49	232.49
Tue 21	321.95	241.24	0.00	0.00	11.72	0.00	229.52	229.52
Wed 22	320.87	244.87	0.00	0.00	11.39	0.00	233.48	233.48
Thu 23	350.63	256.47	0.00	0.01	11.33	0.00	245.13	245.13
Fri 24	387.66	266.03	0.00	0.00	10.27	0.00	255.76	255.76
Sat 25	362.81	244.66	0.00	0.00	8.57	0.00	236.09	236.09
Sun 26	363.62	243.38	0.00	0.00	8.20	0.00	235.18	235.18
Mon 27	339.52	253.05	0.00	0.00	11.19	0.00	241.86	241.86
Tue 28	325.83	245.96	0.00	0.00	10.88	0.00	235.08	235.08
Wed 29	318.03	241.95	0.00	0.00	10.96	0.00	230.99	230.99
Thu 30	322.14	242.28	0.00	0.00	11.26	0.00	231.02	231.02
Average	349.13	247.63	1.72	0.00	10.84	0.00	235.07	235.07
Minimum	318.03	229.38	0.00	0.00	8.20	0.00	218.10	218.10
Maximum	587.83	318.11	51.54	0.01	11.72	0.00	255.77	255.77
GeoMean	---	---	---	---	---	---	---	---
TOTAL	---	7,429	52	0	325	0	7,052	7,052

Liquid Stream Quality

DATE	pH@25°C RAW	pH@25°C OUTFALL 30	pH@25°C OUTFALL 20	pH@25°C OUTFALL 10 FEC	TSS (mg/L) RAW	TSS (mg/L) OUTFALL 30	TSS (mg/L) OUTFALL 20	TSS (mg/L) EPEPS	TSS (mg/L) OUTFALL 10 FEC	TSS (mg/L) OUTFALL 10 FE
Wed 01	7.5	7.7		7.3	300	84			5.1	5.1
Thu 02	7.6			7.5	291				7.8	7.8
Fri 03	7.5			7.4	312				5.7	5.7
Sat 04	7.5			7.4	320				6.0	6.0
Sun 05	7.4			7.4	204				5.7	5.7
Mon 06	7.6			7.9	448				8.5	8.5
Tue 07	7.7			7.5	392				6.5	6.5
Wed 08	7.5			7.5	360				5.9	5.9
Thu 09	7.5			7.5	368				7.8	7.8
Fri 10	7.7			7.6	340				6.4	6.4
Sat 11	7.6			7.6	304				5.9	5.9
Sun 12	7.7			7.6	344				5.5	5.5
Mon 13	7.6			7.6	280				6.5	6.5
Tue 14	7.5			7.6	364				4.4	4.4
Wed 15	7.5			7.6	448				5.2	5.2
Thu 16	7.6			7.5	280				4.9	4.9
Fri 17	7.5			7.4	328				6.4	6.4
Sat 18	7.6			7.5	324				6.4	6.4
Sun 19	7.5			7.5	317				6.5	6.5
Mon 20	7.7			7.5	396				5.7	5.7
Tue 21	7.6			7.5	336				7.0	7.0
Wed 22	7.5			7.5	328				5.1	5.1
Thu 23	7.5			7.5	316				5.3	5.3
Fri 24	7.6			7.4	300				5.4	5.4
Sat 25	7.6			7.4	360				6.2	6.2
Sun 26	7.6			7.5	209				6.4	6.4
Mon 27	7.4			7.5	332				6.6	6.6
Tue 28	7.5			7.5	340				3.4	3.4
Wed 29	7.4			7.4	316				3.5	3.5
Thu 30	7.6			7.5	314				2.8	2.8
Average	7.6	7.7	---	7.5	329	84	---	---	5.8	5.8
Minimum	7.4	7.7	---	7.3	204	84	---	---	2.8	2.8
Maximum	7.7	7.7	---	7.9	448	84	---	---	8.5	8.5
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	$BOD_5/cBOD_5$ (mg/L) RAW BOD_5	OUTFALL 30 BOD_5	OUTFALL 20 BOD_5	EPEPS BOD_5	OUTFALL 10 FEC $cBOD_5$	OUTFALL 10 FE $cBOD_5$	TP (mg/L) RAW	TP OUTFALL 30	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE
Wed 01	293	118			4	4	6.36	4.04			0.36	0.36
Thu 02	266				5	5	6.71				0.35	0.35
Fri 03	329				3	3	6.74				0.30	0.30
Sat 04	340				< 2	< 2	6.93				0.25	0.25
Sun 05	360				4	4	6.90				0.26	0.26
Mon 06	342				5	5	7.24				0.30	0.30
Tue 07	390				4	4	6.49				0.32	0.32
Wed 08	320				3	3	6.89				0.26	0.26
Thu 09	332				4	4	6.59				0.34	0.34
Fri 10	332				3	3	6.46				0.24	0.24
Sat 11	331				3	3	6.66				0.25	0.25
Sun 12	277				3	3	6.55				0.27	0.27
Mon 13	408				3	3	6.60				0.24	0.24
Tue 14	345				3	3	6.71				0.29	0.29
Wed 15	400				4	4	8.09				0.27	0.27
Thu 16	356				3	3	6.52				0.28	0.28
Fri 17	412				3	3	6.84				0.27	0.27
Sat 18	433				4	4	7.52				0.33	0.33
Sun 19	278				3	3	7.50				0.62	0.62
Mon 20	311				3	3	6.92				0.40	0.40
Tue 21	359				4	4	6.74				0.24	0.24
Wed 22	360				4	4	7.26				0.24	0.24
Thu 23	405				4	4	6.45				0.26	0.26
Fri 24	315				4	4	6.15				0.25	0.25
Sat 25	314				4	4	6.32				0.27	0.27
Sun 26	297				4	4	6.61				0.24	0.24
Mon 27	332				4	4	7.05				0.23	0.23
Tue 28	320				2	2	7.32				0.23	0.23
Wed 29	464				2	2	6.87				0.20	0.20
Thu 30	332				3	3	7.39				0.20	0.20
Average	345	118	---	---	3.5	3.5	6.85	4.04	---	---	0.29	0.29
Minimum	266	118	---	---	< 2.0	< 2.0	6.15	4.04	---	---	0.20	0.20
Maximum	464	118	---	---	5.0	5.0	8.09	4.04	---	---	0.62	0.62
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH3-N (mg/L) RAW	NH3-N OUTFALL 30	NH3-N OUTFALL 20	NH3-N EPEPS	NH3-N OUTFALL 10 FEC	NH3-N OUTFALL 10 FE	TKN (mg/L) RAW	TKN OUTFALL 30	TKN OUTFALL 20	TKN OUTFALL 10 FEC	NO_2+NO_3 (mg/L) RAW	NO_2+NO_3 OUTFALL 30	NO_2+NO_3 OUTFALL 20	NO_2+NO_3 OUTFALL 10 FEC
Wed 01	30.5	34.4			0.220	0.220	47.4	44.9		1.77	< 0.01	1.29		7.11
Thu 02	34.1				0.187	0.187	53.0			1.81	0.05			8.15
Fri 03	33.6				0.267	0.267	54.2			1.85				9.81
Sat 04	27.5				0.604	0.604	57.0			2.25				9.89
Sun 05	32.8				1.05	1.05	56.2			2.70	0.08			10.6
Mon 06	34.3				1.31	1.31	57.9			3.07	0.05			9.42
Tue 07	30.0				0.268	0.268	50.4			1.89	< 0.01			8.47
Wed 08	36.1				0.213	0.213	56.5			1.28	0.04			9.49
Thu 09	35.5				0.287	0.287	50.8			1.20	0.04			8.27
Fri 10	34.2				0.378	0.378	50.3			1.43				8.70
Sat 11	35.6				0.351	0.351	54.8			1.77				9.14
Sun 12	36.4				0.488	0.49	54.1			1.91	0.030			9.47
Mon 13	33.3				0.405	0.405	53.7			1.81	< 0.01			9.75
Tue 14	34.9				0.191	0.191	54.3			1.61	0.030			7.78
Wed 15	34.9				0.142	0.142	59.4			1.53	0.06			6.91
Thu 16	32.1				0.238	0.238	49.9			1.72	0.07			7.64
Fri 17	33.5				0.231	0.231	54.1			1.66				7.13
Sat 18	36.0				0.435	0.435	57.9			1.83				6.88
Sun 19	35.5				0.807	0.807	59.6			2.32	0.04			7.72
Mon 20	35.7				0.442	0.442	57.6			1.80	0.03			8.73
Tue 21	35.7				0.260	0.260	53.7			1.70	< 0.07			8.32
Wed 22	35.5				0.321	0.32	55.4			1.71	< 0.01			8.24
Thu 23	33.3				0.276	0.276	48.5			1.42	< 0.01			7.45
Fri 24	30.8				0.519	0.519	45.7			1.44				7.20
Sat 25	32.2				0.558	0.558	48.3			1.87				8.09
Sun 26	36.7				0.706	0.706	54.4			2.21				9.65
Mon 27	29.5				0.674	0.674	56.1			2.15	0.01			8.83
Tue 28	31.4				0.451	0.451	56.4			1.82	0.04			7.77
Wed 29	33.2				0.245	0.245	54.8			1.71	< 0.01			8.77
Thu 30	35.4				0.358	0.358	58.0			1.79	< 0.01			7.87
Average	33.7	34.4	---	---	0.429	0.429	54.0	44.9	---	1.83	0.03	1.29	---	8.44
Minimum	27.5	34.4	---	---	0.142	0.142	45.7	44.9	---	1.20	< 0.01	1.29	---	6.88
Maximum	36.7	34.4	---	---	1.31	1.31	59.6	44.9	---	3.07	0.08	1.29	---	10.6
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---

DATE	Chloride (mg/L) RAW	Chloride OUTFALL 30	Chloride OUTFALL 20	Chloride OUTFALL 10 FEC	*E. coli* (Counts/100 mL) RAW X10^6	*E. coli* OUTFALL 30 X10^6	*E. coli* OUTFALL 20 X10^6	*E. coli* OUTFALL 10 FEC
Wed 01	212	342		128		1.8		11
Thu 02	92.9			157				4
Fri 03	97.2			110				5
Sat 04	86.2			98.9				86
Sun 05	82.5			87.8				9
Mon 06	87.2			81.8				5
Tue 07	81.7			92.1				5
Wed 08	91.2			95.5				6
Thu 09	92.3			96.9				10
Fri 10	94.5			97.3				2
Sat 11	83.9			94.8				5
Sun 12	71.1			88.3				13
Mon 13	75.2			81.9				5
Tue 14	119			103				9
Wed 15	125			129				14
Thu 16	122			131				11
Fri 17	119			138				2
Sat 18	122			138				10
Sun 19	116			129				5
Mon 20	117			120	6.6			3
Tue 21	99.9			119				9
Wed 22	123			113				4
Thu 23	329			163				3
Fri 24	434			356				9
Sat 25	117			338				10
Sun 26	86.5			182				4
Mon 27	93.5			107	4.1			4
Tue 28	96.7			104				2
Wed 29	91.8			101				7
Thu 30	77.1			108				1
Average	121	342	---	130	---	---	---	---
Minimum	71.1	342	---	81.8	4.1	1.8	---	1
Maximum	434	342	---	356	6.6	1.8	---	86
GeoMean	---	---	---	---	5.2	1.8	---	6
TOTAL	---	---	---	---	---	---	---	---

* contact Laboratory for information about the quality assurance associated with the results

Enhanced Primary Treatment (EPT) Usage

Total Bypass (hrs)	EPT Usage (hrs)	%	Total Bypass YTD (hrs)	EPT Usage YTD	% Usage YTD
0	0	100%	501	501	100.00%

Report Comments

AEP Ref #**

** AEP - Alberta Environment & Parks

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).

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 Litre)
MPN	Most Probable Number
NR	No Result
NS	No Sample
INS	Insufficient Sample

Abhishek Bhargava

Senior Manager, Operations

Shane Harnish

Senior Manager, Analytical Operations