PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
December 2020

Digested Sludge: Total Monthly Volume (ML)	64.7

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent: INFs	Influent: RAW	Effluent: Non UV Disinfected: OUTFALL 30	Effluent: Non UV Disinfected: OUTFALL 20	Effluent: Non UV Disinfected: MPW	Effluent: UV Disinfected: EPEEPS	Effluent: UV Disinfected: OUTFALL 10: FEC	Effluent: UV Disinfected: OUTFALL 10: FE
Tue-01	372.5	0.0	245.8	0.0	0.0	11.8	0.0	234.0	234.0
Wed-02	367.3	0.0	241.7	0.0	0.0	12.1	0.0	229.6	229.6
Thu-03	342.7	0.0	247.2	0.0	0.0	11.4	0.0	235.8	235.8
Fri-04	361.2	0.0	243.9	0.0	0.0	11.2	0.0	232.7	232.7
Sat-05	324.3	0.0	239.8	0.0	0.0	11.0	0.0	228.8	228.8
Sun-06	359.2	0.0	243.2	0.0	0.0	10.6	0.0	232.6	232.6
Mon-07	378.7	0.0	259.0	0.0	0.0	10.1	0.0	248.9	248.9
Tue-08	400.8	0.0	290.8	0.0	0.0	10.7	0.0	280.1	280.1
Wed-09	345.4	0.0	250.2	0.0	0.0	10.5	0.0	239.7	239.7
Thu-10	338.2	0.0	246.2	0.0	0.0	10.4	0.0	235.8	235.8
Fri-11	336.6	0.0	244.9	0.0	0.0	10.3	0.0	234.6	234.6
Sat-12	305.9	0.0	241.6	0.0	0.0	10.5	0.0	231.1	231.1
Sun-13	343.4	0.0	244.2	0.0	0.0	11.7	0.0	232.5	232.5
Mon-14	318.4	0.0	246.5	0.0	0.0	12.0	0.0	234.5	234.5
Tue-15	280.3	0.0	239.3	0.0	0.0	12.0	0.0	227.3	227.3
Wed-16	323.4	0.0	239.0	0.0	0.0	12.0	0.0	227.0	227.0
Thu-17	327.9	0.0	237.7	0.0	0.0	11.9	0.0	225.8	225.8
Fri-18	316.8	0.0	239.5	0.0	0.0	12.0	0.0	227.5	227.5
Sat-19	336.8	0.0	242.9	0.0	0.0	12.2	0.0	230.7	230.7
Sun-20	344.4	0.0	240.1	0.0	0.0	10.9	0.0	229.2	229.2
Mon-21	327.9	0.0	239.1	0.0	0.0	11.4	0.0	227.7	227.7
Tue-22	322.7	0.0	234.1	0.0	0.0	11.3	0.0	222.8	222.8
Wed-23	334.3	0.0	237.9	0.0	0.0	11.3	0.0	226.6	226.6
Thu-24	342.3	0.0	241.8	0.0	0.0	10.3	0.0	231.5	231.5
Fri-25	312.9	0.0	210.9	0.0	0.0	10.4	0.0	200.5	200.5
Sat-26	320.1	0.0	224.8	0.0	0.0	10.2	0.0	214.6	214.6
Sun-27	352.3	0.0	229.1	0.0	0.0	10.5	0.0	218.6	218.6
Mon-28	332.6	0.0	236.7	0.0	0.0	10.8	0.0	225.9	225.9
Tue-29	325.0	0.0	247.4	0.0	0.0	10.8	0.0	236.6	236.6
Wed-30	425.8	0.0	235.1	0.0	0.0	11.0	0.0	224.1	224.1
Thu 31	439.4	0.0	235.9	0.0	0.0	10.9	0.0	225.0	225.0
Average	343.9	0.0	241.8	0.0	0.0	11.1	0.0	230.7	230.7
Minimum	280.3	0.0	210.9	0.0	0.0	10.1	0.0	200.5	200.5
Maximum	439.4	0.0	290.8	0.0	0.0	12.2	0.0	280.1	280.1
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	7,496	0	0	344	0	7,152	7,152

Liquid Stream Quality

DATE	pH@25°C: RAW	pH@25°C: OUTFALL 30	pH@25°C: OUTFALL 20	pH@25°C: OUTFALL 10	TSS (mg/L): RAW	TSS (mg/L): OUTFALL 30	TSS (mg/L): OUTFALL 20	TSS (mg/L): EPEEPS	TSS (mg/L): OUTFALL 10: FEC	TSS (mg/L): OUTFALL 10: FE
Tue-01	7.5			7.6	288				4.4	4.4
Wed-02	7.6			7.6	308				3.5	3.5
Thu-03	7.7			7.6	340				3.0	3.0
Fri-04	7.5			7.6	300				3.1	3.1
Sat-05	7.6			7.6	296				3.1	3.1
Sun-06	7.5			7.6	340				3.4	3.4
Mon-07	7.4			7.6	276				3.5	3.5
Tue-08	7.5			7.6	277				3.5	3.5
Wed-09	7.4			7.5	336				4.0	4.0
Thu-10	7.5			7.5	272				3.3	3.3
Fri-11	7.6			7.5	324				2.9	2.9
Sat-12	7.6			7.5	304				3.1	3.1
Sun-13	7.6			7.7	284				3.3	3.3
Mon-14	7.5			7.6	232				3.5	3.5
Tue-15	7.5			7.6	300				3.9	3.9
Wed-16	7.5			7.6	392				2.7	2.7
Thu-17	7.6			7.6	252				2.6	2.6
Fri-18	7.6			7.6	344				3.0	3.0
Sat-19	7.5			7.6	288				4.8	4.8
Sun-20	7.5			7.5	312				2.7	2.7
Mon-21	7.5			7.5	332				2.7	2.7
Tue-22	7.4			7.5	288				2.4	2.4
Wed-23	7.5			7.5	284				2.5	2.5
Thu-24	7.6			7.6	352				2.9	2.9
Fri-25	7.5			7.5	294				1.9	1.9
Sat-26	7.7			7.5	296				2.9	2.9
Sun-27	7.6			7.6	372				2.7	2.7
Mon-28	7.6			7.5	396				3.2	3.2
Tue-29	7.5			7.5	252				6.8	6.8
Wed-30	7.5			7.5	324				4.3	4.3
Thu 31	7.6			7.5	316				3.9	3.9
Average	7.5	---	---	7.6	309	---	---	---	3.3	3.3
Minimum	7.4	---	---	7.5	232	---	---	---	1.9	1.9
Maximum	7.7	---	---	7.7	396	---	---	---	6.8	6.8
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	BOD_5/$cBOD_5$ (mg/L): RAW	BOD_5/$cBOD_5$ (mg/L): OUTFALL 30	BOD_5/$cBOD_5$ (mg/L): OUTFALL 20	BOD_5/$cBOD_5$ (mg/L): EPEEPS	BOD_5/$cBOD_5$ (mg/L): OUTFALL 10: FEC	BOD_5/$cBOD_5$ (mg/L): OUTFALL 10: FE
Tue-01	335				3.0	3.0
Wed-02	328				3.0	3.0
Thu-03	383				2.0	2.0
Fri-04	326				2.0	2.0
Sat-05	309				3.0	3.0
Sun-06	296				2.0	2.0
Mon-07	260				2.0	2.0
Tue-08	308				3.0	3.0
Wed-09	290				< 2.0	2.0
Thu-10	307				2.0	2.0
Fri-11	292				2.0	2.0
Sat-12	336				2.0	2.0
Sun-13	287				2.0	2.0
Mon-14	264				3.0	3.0
Tue-15	341				< 2.0	2.0
Wed-16	318				2.0	2.0
Thu-17	326				2.0	2.0
Fri-18	357				2.0	2.0
Sat-19	348				4.0	4.0
Sun-20	336				3.0	3.0
Mon-21	316				2.0	2.0
Tue-22	252				2.0	2.0
Wed-23	304				2.0	2.0
Thu-24	262				3.0	3.0
Fri-25	290				< 2.0	2.0
Sat-26	321				< 2.0	2.0
Sun-27	306				< 2.0	2.0
Mon-28	345				3.0	3.0
Tue-29	301				4.0	4.0
Wed-30	333				3.0	3.0
Thu 31	338				2.0	2.0
Average	313	---	---	---	2.4	2.4
Minimum	252	---	---	---	< 2.0	2.0
Maximum	383	---	---	---	4.0	4.0
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

DATE	TP (mg/L): RAW	TP (mg/L): OUTFALL 30	TP (mg/L): OUTFALL 20	TP (mg/L): EPEEPS	TP (mg/L): OUTFALL 10: FEC	TP (mg/L): OUTFALL 10: FE
Tue-01	6.92				0.21	0.21
Wed-02	6.66				0.21	0.21
Thu-03	7.00				0.20	0.20
Fri-04	6.55				0.19	0.19
Sat-05	7.04				0.20	0.20
Sun-06	6.57				0.19	0.19
Mon-07	6.33				0.21	0.21
Tue-08	6.20				0.20	0.20
Wed-09	7.40				0.21	0.21
Thu-10	8.18				0.19	0.19
Fri-11	8.25				0.20	0.20
Sat-12	7.59				0.21	0.21
Sun-13	7.51				0.22	0.22
Mon-14	7.03				0.20	0.20
Tue-15	6.78				0.20	0.20
Wed-16	7.77				0.22	0.22
Thu-17	6.74				0.21	0.21
Fri-18	7.22				0.21	0.21
Sat-19	6.69				0.28	0.28
Sun-20	6.09				0.17	0.17
Mon-21	6.71				0.16	0.16
Tue-22	5.93				0.17	0.17
Wed-23	6.7				0.18	0.18
Thu-24	6.58				0.18	0.18
Fri-25	6.51				0.16	0.16
Sat-26	7.21				0.15	0.15
Sun-27	7.46				0.15	0.15
Mon-28	8.85				0.18	0.18
Tue-29	6.90				0.35	0.35
Wed-30	6.90				0.22	0.22
Thu 31	7.02				0.21	0.21
Average	7.01	---	---	---	0.20	0.20
Minimum	5.93	---	---	---	0.15	0.15
Maximum	8.9	---	---	---	0.35	0.35
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

DATE	NH3-N (mg/L): RAW	NH3-N (mg/L): OUTFALL 30	NH3-N (mg/L): OUTFALL 20	NH3-N (mg/L): EPEEPS	NH3-N (mg/L): OUTFALL 10: FEC	NH3-N (mg/L): OUTFALL 10: FE
Tue-01	30.6				0.10	0.10
Wed-02	35.1				0.08	0.08
Thu-03	36.2				0.16	0.16
Fri-04	34.6				0.10	0.10
Sat-05	37.2				0.24	0.24
Sun-06	36.7				0.34	0.34
Mon-07	35.1				0.28	0.28
Tue-08	31.7				0.20	0.20
Wed-09	37.4				0.58	0.58
Thu-10	41.2				0.77	0.77
Fri-11	41.7				0.82	0.82
Sat-12	42.6				1.14	1.14
Sun-13	39.4				2.00	2.00
Mon-14	38.0				1.74	1.74
Tue-15	36.0				0.25	0.25
Wed-16	34.4				0.17	0.17
Thu-17	35.5				0.34	0.34
Fri-18	35.2				1.04	1.04
Sat-19	34.3				0.45	0.45
Sun-20	36.0				0.67	0.67
Mon-21	36.2				0.60	0.60
Tue-22	35.6				0.56	0.56
Wed-23	32.4				0.47	0.47
Thu-24	34.0				0.60	0.60
Fri-25	35.0				0.49	0.49
Sat-26	32.7				0.86	0.86
Sun-27	39.5				1.05	1.05
Mon-28	35.9				0.75	0.75
Tue-29	35.5				0.58	0.58
Wed-30	35.6				0.48	0.48
Thu 31	36.6				0.48	0.48
Average	36.1	---	---	---	0.60	0.60
Minimum	30.6	---	---	---	0.08	0.08
Maximum	42.6	---	---	---	2.00	2.00
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

DATE	TKN (mg/L): RAW	TKN (mg/L): OUTFALL 30	TKN (mg/L): OUTFALL 20	TKN (mg/L): OUTFALL 10: FEC
Tue-01	52.0			1.60
Wed-02	53.8			1.50
Thu-03	56.2			1.60
Fri-04	51.0			1.60
Sat-05	54.7			1.60
Sun-06	53.0			1.70
Mon-07	50.2			1.70
Tue-08	46.1			2.00
Wed-09	57.5			2.00
Thu-10	56.1			2.20
Fri-11	58.7			2.40
Sat-12	54.2			2.80
Sun-13	53.2			3.40
Mon-14	49.0			3.30
Tue-15	55.0			1.50
Wed-16	58.0			1.50
Thu-17	57.0			1.90
Fri-18	59.3			2.50
Sat-19	52.1			1.80
Sun-20	49.8			2.10
Mon-21	51.7			1.80
Tue-22	47.7			2.00
Wed-23	51.9			1.80
Thu-24	47.6			1.80
Fri-25	54.8			1.80
Sat-26	62.0			2.00
Sun-27	60.2			2.40
Mon-28	64.2			2.10
Tue-29	58.0			2.40
Wed-30	50.8			1.80
Thu 31	57.7			2.00
Average	54.3	---	---	2.02
Minimum	46.1	---	---	1.50
Maximum	64.2	---	---	3.40
GeoMean	---	---	---	---
TOTAL	---	---	---	---

DATE	NO_3+NO_2 (mg/L): RAW	NO_3+NO_2 (mg/L): OUTFALL 30	NO_3+NO_2 (mg/L): OUTFALL 20	NO_3+NO_2 (mg/L): OUTFALL 10: FEC
Tue-01				8.24
Wed-02	< 0.01			8.45
Thu-03				9.0
Fri-04				8.5
Sat-05				9.3
Sun-06				10.3
Mon-07				8.64
Tue-08				6.93
Wed-09	< 0.01			9.6
Thu-10				9.36
Fri-11				9.3
Sat-12				10.6
Sun-13				11.2
Mon-14				9.86
Tue-15				8.22
Wed-16	0.05			8.23
Thu-17				7.6
Fri-18				7.4
Sat-19				8.5
Sun-20				8.2
Mon-21				8.4
Tue-22				8.1
Wed-23	0.01			7.3
Thu-24				7.3
Fri-25				8.4
Sat-26				9.7
Sun-27				10.5
Mon-28				10.0
Tue-29				7.88
Wed-30	0.06			7.72
Thu 31				7.28
Average	0.03	---	---	8.7
Minimum	< 0.01	---	---	6.93
Maximum	0.06	---	---	11.2
GeoMean	---	---	---	---
TOTAL	---	---	---	---

DATE	Chloride (mg/L): RAW	Chloride (mg/L): OUTFALL 30	Chloride (mg/L): OUTFALL 20	Chloride (mg/L): OUTFALL 10: FEC
Tue-01	105			106
Wed-02	104			108
Thu-03	103			107
Fri-04	103			108
Sat-05	90			107
Sun-06	81			92
Mon-07	120			88
Tue-08	197			155
Wed-09	106			166
Thu-10	95			116
Fri-11	88			102
Sat-12	81			94
Sun-13	74			83
Mon-14	76			80
Tue-15	84			84
Wed-16	108			95
Thu-17	92			106
Fri-18	102			106
Sat-19	162			121
Sun-20	134			151
Mon-21	113			139
Tue-22	111			116
Wed-23	110			121
Thu-24	120			124
Fri-25	104			127
Sat-26	83			102
Sun-27	84			89
Mon-28	85			86
Tue-29	93			91
Wed-30	98			94
Thu 31	91			98
Average	103	---	---	108
Minimum	74	---	---	80
Maximum	197	---	---	166
GeoMean	---	---	---	---
TOTAL	---	---	---	---

DATE	*E. coli* (Counts/100 mL): RAW X10^6	*E. coli* (Counts/100 mL): OUTFALL 30 X10^6	*E. coli* (Counts/100 mL): OUTFALL 20 X10^6	*E. coli* (Counts/100 mL): OUTFALL 10 FEC
Tue-01				13
Wed-02				4
Thu-03				4
Fri-04				2
Sat-05				4
Sun-06				5
Mon-07				57
Tue-08				10
Wed-09				4
Thu-10				11
Fri-11				6
Sat-12				3
Sun-13				10
Mon-14	2.1			6
Tue-15				6
Wed-16				4
Thu-17				2
Fri-18				7
Sat-19				5
Sun-20				7
Mon-21				4
Tue-22				3
Wed-23				4
Thu-24	1.4			3
Fri-25				2
Sat-26				4
Sun-27				5
Mon-28				6
Tue-29				250
Wed-30				4
Thu 31				2
Average	---	---	---	108
Minimum	1.4	---	---	2
Maximum	2.1	---	---	250
GeoMean	1.7	---	---	6
TOTAL	---	---	---	---

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

Enhanced Primary Treatment (EPT) Usage

Total Bypass (hr)	EPT Usage (hr)	% Usage	Total Bypass YTD (hr)	EPT Usage YTD (hr)	% Usage YTD
0	0	100%	826	826	100%

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 Pump Station
FE	Final Effluent from secondary treatment process (with biological nutrient removal) and disinfection.

FEC	Combined post-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
AEP	Alberta Environment & Parks

Alfredo Suarez
Senior Manager, Operations

Daniel Calcines
Manager, Laboratory Customer Relations