PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
October 2024

Digested Sludge: Total Monthly Volume (ML)	71.1

Volume of Flow (ML)

DATE	Peak Flow (ML/D)	Influent: INFs	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
Tue-01	451.3	0.0	276.3	0.0	0.0	11.8	0.0	264.5	264.5
Wed-02	358.8	0.0	272.9	0.0	0.0	11.5	0.0	261.4	261.4
Thu-03	346.4	0.0	276.4	0.0	0.0	13.1	0.0	263.3	263.3
Fri-04	346.2	0.0	279.3	0.0	0.0	11.5	0.0	267.8	267.8
Sat-05	339.3	0.0	273.5	0.0	0.0	11.8	0.0	261.7	261.7
Sun-06	376.5	0.0	274.8	0.0	0.0	12.1	0.0	262.7	262.7
Mon-07	359.2	0.0	277.7	0.0	0.0	12.1	0.0	265.6	265.6
Tue-08	332.7	0.0	274.7	0.0	0.0	11.6	0.0	263.1	263.1
Wed-09	343.1	0.0	278.7	0.0	0.0	10.9	0.0	267.8	267.8
Thu-10	350.3	0.0	278.3	0.0	0.0	13.5	0.0	264.8	264.8
Fri-11	344.0	0.0	275.5	0.0	0.0	12.8	0.0	262.7	262.7
Sat-12	368.4	0.0	271.1	0.0	0.0	13.1	0.0	258.0	258.0
Sun-13	367.6	0.0	270.2	0.0	0.0	12.5	0.0	257.7	257.7
Mon-14	379.6	0.0	271.2	0.0	0.0	11.5	0.0	259.7	259.7
Tue-15	357.4	0.0	268.8	0.0	0.0	12.9	0.0	255.9	255.9
Wed-16	356.5	0.0	269.9	0.0	0.0	13.1	0.0	256.8	256.8
Thu-17	391.9	0.0	282.1	0.0	0.0	12.9	0.0	269.2	269.2
Fri-18	373.3	0.0	274.3	0.0	0.0	13.3	0.0	261.0	261.0
Sat-19	344.8	0.0	277.0	0.0	0.0	13.3	0.0	263.7	263.7
Sun-20	435.6	0.0	279.8	10.6	0.0	13.7	0.0	255.5	255.5
Mon-21	433.0	0.0	282.7	1.2	0.0	13.2	0.0	268.3	268.3
Tue-22	348.6	0.0	270.9	0.0	0.0	13.3	0.0	257.6	257.6
Wed-23	336.8	0.0	270.8	0.0	0.0	12.9	0.0	257.9	257.9
Thu-24	342.7	0.0	274.4	0.0	0.0	12.9	0.0	261.5	261.5
Fri-25	323.8	0.0	275.1	0.0	0.0	12.8	0.0	262.3	262.3
Sat-26	347.9	0.0	269.5	0.0	0.0	12.6	0.0	256.9	256.9
Sun-27	361.3	0.0	274.7	0.0	0.0	12.8	0.0	261.9	261.9
Mon-28	373.5	0.0	279.5	0.0	0.0	12.4	0.0	267.1	267.1
Tue-29	465.0	0.0	276.8	0.0	0.0	11.3	0.0	265.5	265.5
Wed-30	593.2	0.0	277.6	0.0	0.0	12.3	0.0	265.3	265.3
Thu-31	348.3	0.0	272.8	0.0	0.0	12.4	0.0	260.4	260.4
Average	374.1	0.0	275.1	0.4	0.0	12.5	0.0	262.2	262.2
Minimum	323.8	0.0	268.8	0.0	0.0	10.9	0.0	255.5	255.5
Maximum	593.2	0.0	282.7	10.6	0.0	13.7	0.0	269.2	269.2
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	8,527	12	0	388	0	8,128	8,128

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: OUTFALL 30	TSS: OUTFALL 20	TSS: EPEPS	TSS: OUTFALL 10: FEC	TSS: OUTFALL 10: FE
Tue-01	7.6			7.5	268				5.5	5.5
Wed-02	7.5			7.5	308				5.6	5.6
Thu-03	7.6			7.5	328				5.3	5.3
Fri-04	7.5			7.5	306				5.3	5.3
Sat-05	7.5			7.6	314				4.2	4.2
Sun-06	7.6			7.4	304				5.2	5.2
Mon-07	7.6			7.5	420				5.1	5.1
Tue-08	7.6			7.6	308				4.6	4.6
Wed-09	7.6			7.5	400				4.6	4.6
Thu-10	7.7			7.5	320				4.0	4.0
Fri-11	7.6			7.7	288				4.9	4.9
Sat-12	7.6			7.5	288				3.5	3.5
Sun-13	7.6			7.6	284				4.2	4.2
Mon-14	7.6			7.6	360				4.9	4.9
Tue-15	7.5			7.5	332				4.1	4.1
Wed-16	7.5			7.7	396				3.3	3.3
Thu-17	7.5			7.5	348				4.3	4.3
Fri-18	7.6			7.5	348				4.9	4.9
Sat-19	7.5			7.6	376				4.8	4.8
Sun-20	7.8	7.5		7.6	356	344			4.3	4.3
Mon-21	7.7	7.6		7.5	292	164			2.6	2.6
Tue-22	7.6			7.5	416				4.8	4.8
Wed-23	7.8			7.6	376				5.1	5.1
Thu-24	7.5			7.5	400				4.5	4.5
Fri-25	7.5			7.5	368				3.2	3.2
Sat-26	7.6			7.5	388				4.4	4.4
Sun-27	7.6			7.5	423				4.5	4.5
Mon-28	7.7			7.5	404				5.0	5.0
Tue-29	7.5			7.5	400				4.4	4.4
Wed-30	7.6			7.4	436				4.1	4.1
Thu-31	7.7			7.5	428				5.0	5.0
Average	7.6	7.7	---	7.5	354	254	---	---	4.5	4.5
Minimum	7.5	7.5	---	7.4	268	164	---	---	2.6	2.6
Maximum	7.8	7.8	---	7.7	436	344	---	---	5.6	5.6
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	BOD_5/$cBOD_5$ (mg/L): RAW: BOD_5	BOD_5: OUTFALL 30: BOD_5	BOD_5: OUTFALL 20: BOD_5	BOD_5: EPEPS: BOD_5	OUTFALL 10: FEC: $cBOD_5$	OUTFALL 10: FE: $cBOD_5$
Tue-01	275				4	4
Wed-02	351				4	4
Thu-03	364				4	4
Fri-04	278				4	4
Sat-05	360				4	4
Sun-06	317				4	4
Mon-07	280				4	4
Tue-08	349				< 2	< 2
Wed-09	298				3	3
Thu-10	346				3	3
Fri-11	349				3	3
Sat-12	316				3	3
Sun-13	334				3	3
Mon-14	446				3	3
Tue-15	385				3	3
Wed-16	312				4	4
Thu-17	329				3	3
Fri-18	320				3	3
Sat-19	329				3	3
Sun-20	341	244			3	3
Mon-21	289	162			3	3
Tue-22	330				3	3
Wed-23	325				3	3
Thu-24	312				3	3
Fri-25	348				2	2
Sat-26	318				2	2
Sun-27	344				3	3
Mon-28	311				< 2	< 2
Tue-29	322				2	2
Wed-30	335				2	2
Thu-31	318				3	3
Average	330	203	---	---	3.1	3.1
Minimum	275	162	---	---	< 2	< 2
Maximum	446	244	---	---	4	4
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

DATE	TP (mg/L): RAW	TP: OUTFALL 30	TP: OUTFALL 20	TP: EPEPS	TP: OUTFALL 10: FEC	TP: OUTFALL 10: FE
Tue-01	9.08				0.40	0.40
Wed-02	9.51				0.42	0.42
Thu-03	8.99				0.50	0.50
Fri-04	9.12				0.39	0.39
Sat-05	8.79				0.38	0.38
Sun-06	8.15				0.37	0.37
Mon-07	7.95				0.33	0.33
Tue-08	8.40				0.33	0.33
Wed-09	8.40				0.36	0.36
Thu-10	8.70				0.37	0.37
Fri-11	8.73				0.38	0.38
Sat-12	8.86				0.34	0.34
Sun-13	7.29				0.35	0.35
Mon-14	8.61				0.32	0.32
Tue-15	8.87				0.28	0.28
Wed-16	9.11				0.48	0.48
Thu-17	8.96				0.30	0.30
Fri-18	9.45				0.30	0.30
Sat-19	9.62				0.29	0.29
Sun-20	9.94	8.25			0.27	0.27
Mon-21	8.56	7.67			0.26	0.26
Tue-22	9.18				0.33	0.33
Wed-23	9.54				0.31	0.31
Thu-24	9.40				0.33	0.33
Fri-25	8.73				0.34	0.34
Sat-26	9.02				0.34	0.34
Sun-27	8.86				0.33	0.33
Mon-28	8.60				0.33	0.33
Tue-29	9.26				0.29	0.29
Wed-30	9.53				0.29	0.29
Thu-31	9.29				0.32	0.32
Average	8.92	7.96	---	---	0.34	0.34
Minimum	7.29	7.67	---	---	0.26	0.26
Maximum	9.94	8.25	---	---	0.50	0.50
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

DATE	NH_3-N (mg/L): RAW	NH_3-N: OUTFALL 30	NH_3-N: OUTFALL 20	NH_3-N: EPEPS	NH_3-N: OUTFALL 10: FEC	NH_3-N: OUTFALL 10: FE	un-ionized NH_3-N (mg/L): OUTFALL 30	un-ionized NH_3-N: OUTFALL 20	un-ionized NH_3-N: OUTFALL 10
Tue-01	39.7				3.85	3.85			
Wed-02	39.6				3.34	3.34			
Thu-03	38.7				2.65	2.65			
Fri-04	38.6				1.36	1.36			
Sat-05	38.7				1.79	1.79			
Sun-06	37.8				2.46	2.46			
Mon-07	37.1				2.78	2.78			
Tue-08	38.2				2.68	2.68			
Wed-09	36.4				1.81	1.81			
Thu-10	37.7				2.04	2.04			
Fri-11	37.0				2.17	2.17			
Sat-12	36.7				2.40	2.40			
Sun-13	37.9				2.94	2.94			
Mon-14	38.6				3.26	3.26			
Tue-15	37.1				3.98	3.98			
Wed-16	32.1				2.60	2.60			
Thu-17	33.7				1.58	1.58			
Fri-18	38.2				0.84	0.84			
Sat-19	37.2				2.02	2.02			
Sun-20	35.9	47.9			2.94	2.94			
Mon-21	36.2	39.1			2.29	2.29			
Tue-22	34.8				3.72	3.72			
Wed-23	36.0				3.52	3.52			
Thu-24	35.4				4.34	4.34			
Fri-25	31.5				3.53	3.53			
Sat-26	32.1				4.07	4.07			
Sun-27	35.1				4.40	4.40			
Mon-28	34.8				3.39	3.39			
Tue-29	33.7				1.61	1.61			
Wed-30	39.7				2.30	2.30			
Thu-31	40.3				3.23	3.23			
Average	36.7	43.5	---	---	2.77	2.77	---	---	---
Minimum	31.5	39.1	---	---	0.84	0.84	---	---	---
Maximum	40.3	47.9	---	---	4.40	4.40	---	---	---
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

DATE	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	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
Tue-01	66.7			6.3				11.60	92			96				18
Wed-02	63.6			5.7	< 0.01			11.8	90			96				42
Thu-03	63.1			4.4				12.2	90			94				18
Fri-04	63.1			3.3				13.3	85			94				20
Sat-05	61.4			3.9				12.7	80			95				14
Sun-06	55.7			4.2				13.3	77			89				9
Mon-07	55.3			4.2				11.7	82			84				8
Tue-08	55.8			4.1				10.6	79			105	4.0			12
Wed-09	55.4			3.3	0.01			12.7	81			96				8
Thu-10	56.7			3.7				12.3	71			92	3.8			11
Fri-11	60.1			4.3				11.4	74			90				13
Sat-12	58.7			4.0				9.8	68			93				3
Sun-13	60.2			4.7				9.8	69			89				16
Mon-14	66.5			5.0				9.9	76			84				16
Tue-15	62.1			6.1				8.7	80			85				17
Wed-16	60.7			4.8	< 0.01			10.2	76			92				12
Thu-17	63.2			3.3				9.8	74			87				22
Fri-18	65.0			2.5				9.8	69			87				6
Sat-19	71.2			3.9				10.2	77			86				4
Sun-20	66.7	68.3		4.5		< 0.01		10.0	75	80		87		2.6		7
Mon-21	58.8	53.7		4.2		0.02		9.8	82	82		85		18.0		12
Tue-22	56.6			6.0				8.2	83			84				35
Wed-23	61.5			5.6	< 0.01			8.5	87			86				14
Thu-24	60.3			6.5				9.1	82			84				16
Fri-25	62.4			6.2				9.6	83			86				15
Sat-26	64.0			7.0				10.0	85			89				8
Sun-27	66.5			4.8				10.3	80			83				6
Mon-28	61.9			5.7				9.7	84			80				9
Tue-29	58.7			3.8				9.4	83			86				7
Wed-30	62.2			3.9	< 0.01			10.7	83			86				8
Thu-31	61.8			5.1				11.3	82			87				4
Average	61.5	61.0	---	4.7	0.01	0.01	---	10.6	80	81	---	89			---	
Minimum	55.3	53.7	---	2.5	< 0.01	< 0.01	---	8.2	68	80	---	80	3.8	2.6	---	3
Maximum	71.2	68.3	---	7.0	0.01	0.02	---	13.3	92	82	---	105	4.0	18.0	---	42
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	3.9	6.9	---	11
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
8	8	100%	419	419	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). Pre-Ultraviolet 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

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