PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
January 2025

Digested Sludge: Total Monthly Volume (ML)	68.3

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: EPEPS	Effluent: UV Disinfected: OUTFALL 10: FEC	Effluent: UV Disinfected: OUTFALL 10: FE
Wed-01	308.7	0.0	259.2	0.0	0.0	11.9	0.0	247.3	247.3
Thu-02	338.0	0.0	270.2	0.0	0.0	12.3	0.0	257.9	257.9
Fri-03	333.2	0.0	274.8	0.0	0.0	12.2	0.0	262.6	262.6
Sat-04	341.3	0.0	271.9	0.0	0.0	12.0	0.0	259.9	259.9
Sun-05	370.5	0.0	274.0	0.0	0.0	11.9	0.0	262.1	262.1
Mon-06	356.1	0.0	280.9	0.0	0.0	12.0	0.0	268.9	268.9
Tue-07	336.1	0.0	273.4	0.0	0.0	12.9	0.0	260.5	260.5
Wed-08	358.9	0.0	278.5	0.0	0.0	12.4	0.0	266.1	266.1
Thu-09	339.8	0.0	274.1	0.0	0.0	13.8	0.0	260.3	260.3
Fri-10	476.2	0.0	289.4	13.6	0.0	12.6	0.0	263.2	263.2
Sat-11	440.5	0.0	322.6	7.0	0.0	13.3	0.0	302.3	302.3
Sun-12	408.1	0.0	286.3	0.0	0.0	13.3	0.0	273.0	273.0
Mon-13	359.9	0.0	282.5	0.0	0.0	13.3	0.0	269.2	269.2
Tue-14	343.2	0.0	275.7	0.0	0.0	13.5	0.0	262.2	262.2
Wed-15	356.7	0.0	283.8	0.0	0.0	13.4	0.0	270.4	270.4
Thu-16	377.5	0.0	286.6	0.0	0.0	13.9	0.0	272.7	272.7
Fri-17	324.8	0.0	270.6	0.0	0.0	13.7	0.0	256.9	256.9
Sat-18	339.6	0.0	270.2	0.0	0.0	14.2	0.0	256.0	256.0
Sun-19	366.8	0.0	274.6	0.0	0.0	14.1	0.0	260.5	260.5
Mon-20	352.5	0.0	278.8	0.0	0.0	13.7	0.0	265.1	265.1
Tue-21	337.6	0.0	271.5	0.0	0.0	13.6	0.0	257.9	257.9
Wed-22	339.1	0.0	265.9	0.0	0.0	13.3	0.0	252.6	252.6
Thu-23	395.8	0.0	271.4	0.0	0.0	13.2	0.0	258.2	258.2
Fri-24	325.6	0.0	270.6	0.0	0.0	12.5	0.0	258.1	258.1
Sat-25	365.6	0.0	267.0	0.0	0.0	12.1	0.0	254.9	254.9
Sun-26	363.7	0.0	269.2	0.0	0.0	12.1	0.0	257.1	257.1
Mon-27	339.2	0.0	275.4	0.0	0.0	12.1	0.0	263.3	263.3
Tue-28	375.0	0.0	275.0	0.0	0.0	12.2	0.0	262.8	262.8
Wed-29	352.5	0.0	280.5	0.0	0.0	12.0	0.0	268.5	268.5
Thu-30	335.9	0.0	273.6	0.0	0.0	11.8	0.0	261.8	261.8
Fri-31	327.5	0.0	272.3	0.0	0.0	11.1	0.0	261.2	261.2
Average	358.3	0.0	276.5	0.7	0.0	12.8	0.0	263.0	263.0
Minimum	324.8	0.0	259.2	0.0	0.0	11.1	0.0	247.3	247.3
Maximum	476.2	0.0	322.6	13.6	0.0	14.2	0.0	302.3	302.3
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	8,571	21	0	396	0	8,154	8,154

Liquid Stream Quality

DATE	pH@25°C: RAW	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	BOD5/cBOD5 (mg/L): RAW	BOD5/cBOD5 (mg/L): OUTFALL 30	BOD5/cBOD5 (mg/L): OUTFALL 20	BOD5/cBOD5 (mg/L): EPEPS	BOD5/cBOD5 (mg/L): OUTFALL 10: FEC: cBOD5	BOD5/cBOD5 (mg/L): OUTFALL 10: FE: cBOD5	TP (mg/L): RAW	TP (mg/L): OUTFALL 30	TP (mg/L): OUTFALL 20	TP (mg/L): EPEPS	TP (mg/L): OUTFALL 10: FEC	TP (mg/L): OUTFALL 10: FE	NH3-N (mg/L): RAW	NH3-N (mg/L): OUTFALL 30	NH3-N (mg/L): OUTFALL 20	NH3-N (mg/L): EPEPS	NH3-N (mg/L): OUTFALL 10: FEC	NH3-N (mg/L): OUTFALL 10: FE	un-Ionized NH3-N (mg/L): OUTFALL 30	un-Ionized NH3-N (mg/L): OUTFALL 20	un-Ionized NH3-N (mg/L): OUTFALL 10	TKN (mg/L): RAW	TKN (mg/L): OUTFALL 30	TKN (mg/L): OUTFALL 20	TKN (mg/L): OUTFALL 10: FEC	NO3-NO2 (mg/L): RAW	NO3-NO2 (mg/L): OUTFALL 30	NO3-NO2 (mg/L): OUTFALL 20	NO3-NO2 (mg/L): OUTFALL 10: FEC	Chloride (mg/L): RAW	Chloride (mg/L): OUTFALL 30	Chloride (mg/L): OUTFALL 20	Chloride (mg/L): OUTFALL 10: FEC	E. coli (Counts/100 mL): RAW	E. coli (Counts/100 mL): OUTFALL 30	E. coli (Counts/100 mL): OUTFALL 20	E. coli (Counts/100 mL): OUTFALL 10: FEC
								BOD_5	BOD_5	BOD_5	BOD_5	$cBOD_5$	$cBOD_5$																											X10^6	X10^6	X10^6	
Wed-01	7.6	336				3.4	3.4	332				3	3	10.60				0.26	0.26	44.3				1.78	1.78				65.6			3.4	< 0.01			10.6	95.6			160.0				7
Thu-02	7.6	324				3.4	3.4	345				3	3	9.43				0.28	0.28	43.3				2.38	2.38				64.6			4.0				12.4	101.0			95.7				8
Fri-03	7.5	336				3.1	3.1	336				2	2	10.90				0.34	0.34	34.4				2.22	2.22				68.1			4.0				10.1	94.3			100.0				13
Sat-04	7.4	299				4.3	4.3	336				3	3	11.80				0.32	0.32	34.1				2.03	2.03				74.9			4.2				11.3	89.3			94.7				9
Sun-05	7.6	272				3.6	3.6	298				2	2	10.90				0.38	0.38	33.5				2.33	2.33				64.4			4.6				13.2	86.0			90.7				10
Mon-06	7.6	312				4.4	4.4	265				3	3	11.80				0.32	0.32	39.4				2.52	2.52				76.1			4.5				10.8	97.6			89.3				7
Tue-07	7.7	372				3.3	3.3	334				3	3	14.00				0.32	0.32	45.5				3.38	3.38				78.7			5.2				11.6	104.0			103.0				10
Wed-08	7.6	389				4.1	4.1	362				3	3	11.40				0.31	0.31	44.7				3.66	3.66				79.2			6.0	< 0.01			11.7	128.0			111.0				7
Thu-09	7.4	356				5.1	5.1	314				4	4	8.56				0.31	0.31	44.5				2.77	2.77				55.3			4.2				13.0	146.0			129.0				10
Fri-10	7.4	384	73			4.0	4.0	344	179			3	3	9.10	13.10			0.34	0.34	42.0	45.1			2.48	2.48				54.1	83.8		3.6		0.10		13.2	230.0	385		114.0		1.8			10
Sat-11	7.4	312	64			3.3	3.3	326	135			3	3	7.59	6.05			0.37	0.37	36.7	38.8			2.73	2.73				52.1	41.6		4.0		0.07		12.1	226.0	467		229.0		0.7			8
Sun-12	7.4	320				4.4	4.4	368				3	3	8.93				0.37	0.37	41.3				4.11	4.11				58.3			5.3				11.8	217.0			194.0				10
Mon-13	7.5	360				4.3	4.3	370				2	2	10.70				0.30	0.30	43.6				3.50	3.50				76.8			5.5				11.9	155.0			165.0				13
Tue-14	7.5	460				3.8	3.8	357				3	3	9.67				0.30	0.30	44.3				2.57	2.57				68.0			4.3				13.6	167.0			160.6	2.1			10
Wed-15	7.5	424				3.5	3.5	369				2	2	9.39				0.37	0.37	44.8				2.54	2.54				64.9			4.1	< 0.01			12.9	216.0			165.0				10
Thu-16	7.5	324				2.8	2.8	340				2	2	8.22				0.33	0.33	43.4				2.46	2.46				62.2			4.3				12.2	184.0			220.0	2.0			6
Fri-17	7.5	360				3.6	3.6	358				3	3	10.40				0.44	0.44	46.4				3.35	3.39				75.9			6.2				12.7	125.0			210.0				8
Sat-18	7.4	344				3.7	3.7	313				3	3	9.79				0.41	0.41	47.3				3.71	3.73				79.0			6.6				12.5	96.7			143.0				11
Sun-19	7.6	340				4.2	4.2	363				3	3	9.70				0.40	0.40	45.2				4.56	4.56				77.1			6.4				12.6	84.1			106.0				10
Mon-20	7.5	317				5.2	5.2	302				3	3	9.32				0.16	0.16	44.4				3.84	3.84				73.3			5.4				11.8	85.1			95.9				12
Tue-21	7.4	279				3.9	3.9	279				2	2	8.85				0.33	0.33	44.1				3.17	3.17				65.0			4.9				12.6	101.0			104.0				19
Wed-22	7.4	314				3.9	3.9	314				2	2	8.87				0.34	0.34	45.9				3.46	3.45				61.7			5.0	< 0.01			12.8	130.0			115.0				13
Thu-23	7.5	348				3.8	3.8	372				3	3	8.68				0.37	0.37	44.3				3.74	3.74				60.9			5.4				12.8	130.0			133.0				10
Fri-24	7.5	337				4.5	4.5	375				3	3	8.75				0.38	0.38	46.4				3.68	3.69				63.6			5.6				13.6	118.0			148.0				9
Sat-25	7.6	306				4.0	4.0	341				3	3	7.45				0.34	0.34	42.4				1.65	1.65				54.8			3.0				10.5	105.0			125.0				6
Sun-26	7.6	340				2.6	2.6	378				3	3	7.93				0.29	0.29	42.3				0.95	0.99				54.6			2.1				8.8	104.0			112.0				5
Mon-27	7.5	416				3.8	3.8	396				3	3	7.88				0.29	0.29	41.7				0.92	0.92				57.1			1.9				8.5	111.0			109.0				3
Tue-28	7.5	408				2.1	2.1	327				2	2	8.30				0.31	0.31	41.6				1.25	1.25				57.6			2.4				9.1	153.0			138.0				4
Wed-29	7.5	394				3.8	3.8	353				3	3	8.65				0.32	0.32	41.7				4.19	4.18				57.6			4.9	< 0.01			12.5	297.0			219.0				10
Thu-30	7.4	316				4.3	4.3	337				3	3	8.26				0.23	0.23	44.0				5.62	5.62				56.8			4.3				12.6	132.0			260.0				17
Fri-31	7.5	292				4.3	4.3	303				2	2	8.54				0.34	0.34	41.8				6.10	6.10				57.9			7.1				12.7	119.0			172.4				18
Average	7.5	342	157	---	---	3.8	3.8	342	157	---	---	2.7	2.7	9.51	9.58	---	---	0.33	0.33	42.6	42.0	---	---	3.02	3.02	---	---	---	65.1	62.7	---	4.6	< 0.01	0.09	---	11.9	136	426	---	142			---	
Minimum	7.4	299	135	---	---	2.1	2.1	299	135	---	---	< 2	< 2	7.45	6.05	---	---	0.16	0.16	33.5	38.8	---	---	0.92	0.92	---	---	---	52.1	41.6	---	1.9	< 0.01	0.07	---	8.3	84.1	385	---	89.3	2.0	0.7	---	3
Maximum	7.7	379	179	---	---	5.2	5.2	379	179	---	---	4	4	14.00	13.10	---	---	0.44	0.44	47.3	45.1	---	---	6.10	6.10	---	---	---	79.2	83.8	---	7.1	< 0.01	0.10	---	13.6	297	467	---	290	2.1	1.8	---	18
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	2.0	1.1	---	5
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
5	5	100%	5	5	100%

Report Comments

	January 17, 2025 Peak Flow (MLD) was changed from 591.8 to 324.8

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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