Gold Bar Wastewater Treatment Plant
Plant Performance Report
April 2025

Digested Sludge: Total Monthly Volume (ML)	78.1

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 EPIEPS	Effluent UV Disinfected OUTFALL 10 FEC	Effluent UV Disinfected OUTFALL 10 FE
Tue-01	593.1	0.0	377.4	80.6	0.0	10.8	0.0	286.0	286.0
Wed-02	425.6	0.0	330.3	5.7	0.0	12.3	0.0	312.3	312.3
Thu-03	376.9	0.0	302.3	0.0	0.0	11.1	0.0	291.2	291.2
Fri-04	431.2	0.0	301.6	0.0	0.3	11.5	0.0	289.8	289.8
Sat-05	416.4	0.0	301.8	0.0	0.0	11.2	0.0	290.6	290.6
Sun-06	494.5	0.0	307.6	0.0	0.0	11.4	0.0	296.2	296.2
Mon-07	402.8	0.0	319.6	0.0	0.0	11.3	0.0	308.3	308.3
Tue-08	393.9	0.0	327.1	0.0	0.0	11.2	0.0	315.9	315.9
Wed-09	374.3	0.0	309.8	0.0	0.0	11.8	0.0	298.0	298.0
Thu-10	389.5	0.0	298.2	0.0	0.0	11.0	0.0	287.2	287.2
Fri-11	362.7	0.0	299.6	0.0	0.0	11.3	0.0	288.3	288.3
Sat-12	358.3	0.0	290.6	0.0	0.0	11.5	0.0	279.1	279.1
Sun-13	355.6	0.0	289.6	0.0	0.0	10.5	0.0	279.1	279.1
Mon-14	358.7	0.0	295.0	0.0	0.0	10.5	0.0	284.5	284.5
Tue-15	351.7	0.0	285.5	0.0	0.0	11.6	0.0	273.9	273.9
Wed-16	332.5	0.0	283.7	0.0	0.0	12.2	0.0	271.5	271.5
Thu-17	323.1	0.0	280.6	0.0	0.0	11.4	0.0	269.2	269.2
Fri-18	343.3	0.0	279.3	0.0	0.0	10.2	0.0	269.1	269.1
Sat-19	337.3	0.0	272.7	0.0	0.0	8.3	0.0	264.4	264.4
Sun-20	342.4	0.0	271.1	0.0	0.0	8.2	0.0	262.9	262.9
Mon-21	366.0	0.0	280.5	0.0	0.0	7.7	0.0	272.8	272.8
Tue-22	357.4	0.0	283.1	0.0	0.0	8.9	0.0	274.2	274.2
Wed-23	341.2	0.0	281.1	0.0	0.0	7.6	0.0	273.5	273.5
Thu-24	333.2	0.0	278.7	0.0	0.0	7.7	0.0	271.0	271.0
Fri-25	328.3	0.0	281.2	0.0	0.0	7.7	0.0	273.5	273.5
Sat-26	331.3	0.0	275.7	0.0	0.0	7.6	0.0	268.1	268.1
Sun-27	595.3	0.0	325.8	19.4	0.0	7.6	0.0	298.8	298.8
Mon-28	345.4	0.0	286.8	0.0	0.0	7.6	0.0	279.2	279.2
Tue-29	356.4	0.0	273.6	0.0	0.0	7.7	0.0	265.9	265.9
Wed-30	336.4	0.0	273.5	0.0	0.0	7.6	0.0	265.9	265.9
Average	381.2	0.0	295.4	3.5	0.0	9.9	0.0	282.9	282.9
Minimum	323.1	0.0	271.1	0.0	0.0	7.6	0.0	262.9	262.9
Maximum	595.3	0.0	377.4	80.6	0.3	12.3	0.0	315.9	315.9
GoldBar	---	---	---	---	---	---	---	---	---
TOTAL	---	0	8,983	106	0	297	0	8,460	8,460

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 EPIEPS	TSS OUTFALL 10 FEC	TSS OUTFALL 10 FE
Tue-01	7.4	7.5		7.3	316	75			5.4	5.4
Wed-02	7.6	7.7		7.3	272	72			3.8	3.8
Thu-03	7.5			7.4	303				3.6	3.6
Fri-04	7.3			7.4	296				4.8	4.8
Sat-05	7.3			7.4	332				4.8	4.8
Sun-06	7.4			7.4	260				4.4	4.4
Mon-07	7.6			7.4	320				5.7	5.7
Tue-08	7.4			7.4	308				6.9	6.9
Wed-09	7.3			7.4	272				4.9	4.9
Thu-10	7.5			7.5	320				4.2	4.2
Fri-11	7.4			7.4	272				3.8	3.8
Sat-12	7.4			7.5	280				4.3	4.3
Sun-13	7.6			7.3	328				4.0	4.0
Mon-14	7.5			7.5	332				5.6	5.6
Tue-15	7.4			7.4	288				4.3	4.3
Wed-16	7.5			7.3	276				4.4	4.4
Thu-17	7.5			7.5	312				3.4	3.4
Fri-18	7.4			7.5	340				3.3	3.3
Sat-19	7.5			7.4	304				3.3	3.3
Sun-20	7.4			7.4	308				3.5	3.5
Mon-21	7.4			7.4	352				4.7	4.7
Tue-22	7.5			7.5	371				5.0	5.0
Wed-23	7.5			7.5	400				3.6	3.6
Thu-24	7.6			7.6	332				4.2	4.2
Fri-25	7.4			7.5	308				4.4	4.4
Sat-26	7.5			7.5	324				5.0	5.0
Sun-27	7.4	7.6		7.5	420	84			6.8	6.8
Mon-28	7.4			7.6	260				4.7	4.7
Tue-29	8.5			7.6	332				4.1	4.1
Wed-30	7.4			7.5	264				3.6	3.6
Average	7.5	7.6	---	7.5	313	77	---	---	4.5	4.5
Minimum	7.3	7.5	---	7.3	260	72	---	---	3.3	3.3
Maximum	8.5	7.7	---	7.9	420	84	---	---	6.9	6.9
GoldBar	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	$BOD_5/cBOD_5$ (mg/L) RAW	BOD_5 OUTFALL 30	BOD_5 OUTFALL 20	BOD_5 EPIEPS	$cBOD_5$ OUTFALL 10 FEC	$cBOD_5$ OUTFALL 10 FE	TP (mg/L) RAW	TP OUTFALL 30	TP OUTFALL 20	TP EPIEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE
Tue-01	307	112			2	2	6.35	7.30			0.28	0.28
Wed-02	299	100			2	2	7.09	5.81			0.28	0.28
Thu-03	317				3	3	7.73				0.30	0.30
Fri-04	308				3	3	7.64				0.32	0.32
Sat-05	299				3	3	7.18				0.33	0.33
Sun-06	291				2	2	7.81				0.30	0.30
Mon-07	339				3	3	8.30				0.33	0.33
Tue-08	313				3	3	7.62				0.36	0.36
Wed-09	323				3	3	8.17				0.31	0.31
Thu-10	301				2	2	8.00				0.33	0.33
Fri-11	343				3	3	7.96				0.31	0.31
Sat-12	260				2	2	9.53				0.32	0.32
Sun-13	315				3	3	9.60				0.34	0.34
Mon-14	254				3	3	7.41				0.32	0.32
Tue-15	346				3	3	9.28				0.33	0.33
Wed-16	355				3	3	9.71				0.32	0.32
Thu-17	323				2	2	10.50				0.30	0.30
Fri-18	233				< 2	< 2	10.00				0.32	0.32
Sat-19	313				2	2	8.20				0.30	0.30
Sun-20	295				2	2	8.47				0.30	0.30
Mon-21	339				3	3	8.00				0.32	0.32
Tue-22	304				3	3	7.89				0.36	0.36
Wed-23	299				3	3	8.84				0.34	0.34
Thu-24	326				3	3	8.79				0.35	0.35
Fri-25	292				3	3	8.07				0.40	0.40
Sat-26	352				3	3	8.42				0.42	0.42
Sun-27	320	218			4	4	8.12	8.96			0.38	0.38
Mon-28	304				4	4	8.00				0.39	0.39
Tue-29	311				4	4	9.17				0.32	0.32
Wed-30	253				4	4	8.33				0.33	0.33
Average	310	143	---	---	3	3	8.34	7.36	---	---	0.33	0.33
Minimum	233	100	---	---	< 2	< 2	6.35	5.81	---	---	0.28	0.28
Maximum	352	218	---	---	4	4	10.50	8.96	---	---	0.42	0.42
GoldBar	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH3-N (mg/L) RAW	NH3-N OUTFALL 30	NH3-N OUTFALL 20	NH3-N EPIEPS	NH3-N OUTFALL 10 FEC	NH3-N OUTFALL 10 FE	un-ionized NH3-N (mg/L) OUTFALL 30	un-ionized NH3-N OUTFALL 20	un-ionized NH3-N OUTFALL 10	TKN (mg/L) RAW	TKN OUTFALL 30	TKN OUTFALL 20	TKN OUTFALL 10 FEC
Tue-01	31.6	2.6			1.82	1.82				42.2	49.0		3.4
Wed-02	36.2	31.2			3.45	3.45				53.4	38.7		5.1
Thu-03	41.3				6.38	6.38				55.6			7.6
Fri-04	40.5				6.48	6.48				58.1			8.4
Sat-05	39.0				5.49	5.49				55.6			7.7
Sun-06	38.1				5.81	5.81				59.5			8.1
Mon-07	38.0				5.67	5.67				61.3			7.6
Tue-08	36.8				5.80	5.80				55.3			7.9
Wed-09	39.3				6.16	6.16				65.8			8.3
Thu-10	38.2				5.78	5.78				58.0			7.3
Fri-11	39.8				5.86	5.86				59.7			7.8
Sat-12	43.7				5.37	5.37				62.1			6.9
Sun-13	42.6				5.52	5.53				64.8			7.1
Mon-14	40.5				5.24	5.24				51.6			7.1
Tue-15	42.5				4.34	4.34				63.4			5.8
Wed-16	43.1				4.51	4.51				65.9			6.1
Thu-17	43.5				4.93	4.93				67.6			6.3
Fri-18	43.4				5.56	5.56				70.9			7.2
Sat-19	42.0				4.69	4.69				56.9			6.2
Sun-20	43.0				4.46	4.46				53.7			5.6
Mon-21	42.7				4.63	4.63				55.8			5.9
Tue-22	44.6				4.88	4.88				53.5			6.5
Wed-23	42.7				4.17	4.17				56.3			5.4
Thu-24	44.8				4.89	4.89				63.0			6.3
Fri-25	40.7				6.34	6.34				50.4			7.9
Sat-26	43.8				6.27	6.27				54.1			7.6
Sun-27	37.5	39.4			6.62	6.62				51.5	47.9		8.3
Mon-28	43.0				8.03	8.03				50.6			8.9
Tue-29	43.9				5.70	5.70				60.5			7.2
Wed-30	40.5				2.30	2.30				60.3			4.6
Average	40.9	24.4	---	---	5.24	5.24	---	---	---	57.8	45.2	---	6.9
Minimum	31.6	2.6	---	---	1.82	1.82	---	---	---	42.2	38.7	---	3.4
Maximum	44.8	39.4	---	---	8.03	8.03	---	---	---	70.9	49.0	---	8.9
GoldBar	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---

DATE	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	E. coli OUTFALL 30 X10^6	E. coli OUTFALL 20 X10^6	E. coli OUTFALL 10 FEC
Tue-01		0.16		9.1	131.0	158		183.0		1.4		11
Wed-02	< 0.01	0.09		8.3	109.0	121		139.0		1.0		8
Thu-03				9.2	106.0			122.0				13
Fri-04				8.9	108.0			119.0			0	14
Sat-05				8.8	99.7			115.0				14
Sun-06				9.1	94.5			107.0				4
Mon-07				9.4	112.0			107.0				6
Tue-08				9.0	136.0			122.0				13
Wed-09	< 0.01			9.7	135.0			122.0				8
Thu-10				10.9	152.0			120.0	3.0			12
Fri-11				11.4	121.0			118.0				21
Sat-12				11.4	98.4			114.0				9
Sun-13				11.5	97.5			103.0				18
Mon-14				11.1	103.0			103.0				28
Tue-15				11.4	109.0			106.0				22
Wed-16	< 0.15			11.3	100.0			106.0				21
Thu-17				11.7	98.5			109.0	2.9			19
Fri-18				10.7	92.5			106.0				17
Sat-19				11.0	98.3			102.0				11
Sun-20				10.6	92.3			98.5				6
Mon-21				10.3	94.2			96.0				10
Tue-22				11.2	97.6			98.9				18
Wed-23	< 0.01			9.5	94.2			101.0				13
Thu-24				11.0	99.0			105.0				8
Fri-25				8.6	89.6			102.0				13
Sat-26				8.3	89.4			98.1				14
Sun-27		0.08		7.6	96.4	117		96.1		2.4		14
Mon-28				7.3	94.2			92.8				55
Tue-29				7.9	95.5			100.0				21
Wed-30	< 0.15			7.1	95.0			98.7				11
Average	< 0.07	0.11	---	8.8	105	132	---	110			0	
Minimum	< 0.01	0.08	---	7.1	89.4	117	---	92.8	2.9	1.0	0	4
Maximum	< 0.15	0.16	---	11.7	152	158	---	183	3.0	2.4	0	55
GoldBar	---	---	---	---	---	---	---	---	2.9	1.5	0	13
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
21	21	100%	205	205	100%

Report Comments

TP and TKN results for Raw samples from April 3, 4, 10, 11, 17, and 24 were run past recommended holding time.
pH results for Raw samples from April 29 and 30 were run past recommended holding time.
E. coli result for Outfall 20 from April 4 was repeated, sample exceeded the recommended holding time.

AEP Ref #

439428	AEPA was notified of a potable water release on site on April 4, 2025. Potable water flowed overland and 0.3 ML flowed to the river out Outfall 20. No wastewater was discharge. The potable water was dechlorinated using dechlorination sucks. 7-day letter was submitted.

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

Trina Manning M.Sc., P.Eng.
Senior Manager, WWTP Operations

Paul Jacquier MBA, BMSc.
Senior Manager, Analytical Operations