Gold Bar Wastewater Treatment Plant
Plant Performance Report
May 2025

Digested Sludge: Total Monthly Volume (ML)	75.1

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
Thu-01	307.1	0.0	272.8	0.0	0.0	7.6	0.0	265.2	265.2
Fri-02	327.3	0.0	274.4	0.0	0.0	7.7	0.0	266.7	266.7
Sat-03	334.5	0.0	270.7	0.0	0.0	8.1	0.0	262.6	262.6
Sun-04	353.8	0.0	274.2	0.0	0.0	7.7	0.0	266.5	266.5
Mon-05	354.4	0.0	270.0	0.0	0.0	7.5	0.0	262.5	262.5
Tue-06	325.3	0.0	262.3	0.0	0.0	7.5	0.0	254.8	254.8
Wed-07	316.5	0.0	266.0	0.0	0.0	4.7	0.0	261.3	261.3
Thu-08	317.0	0.0	265.3	0.0	0.0	7.4	0.0	257.9	257.9
Fri-09	307.2	0.0	263.8	0.0	0.0	7.1	0.0	256.7	256.7
Sat-10	321.8	0.0	261.8	0.0	0.0	7.2	0.0	254.6	254.6
Sun-11	656.3	0.0	289.5	24.5	0.0	5.7	0.0	259.3	259.3
Mon-12	545.1	0.0	300.4	24.7	0.0	7.0	0.0	268.7	268.7
Tue-13	348.4	0.0	273.2	0.6	0.0	6.5	0.0	266.1	266.1
Wed-14	355.5	0.0	270.0	0.0	0.0	6.0	0.0	264.0	264.0
Thu-15	576.1	0.0	322.2	16.1	0.0	7.0	0.0	299.1	299.1
Fri-16	354.0	0.0	281.8	0.0	0.0	8.4	0.0	273.4	273.4
Sat-17	352.1	0.0	267.1	0.0	0.0	5.8	0.0	261.3	261.3
Sun-18	378.4	0.0	259.3	0.0	0.0	6.7	0.0	252.6	252.6
Mon-19	330.3	0.0	269.9	0.0	0.0	6.5	0.0	263.4	263.4
Tue-20	559.6	0.0	297.0	14.3	0.0	7.8	0.0	274.9	274.9
Wed-21	576.7	0.0	351.2	24.4	0.0	7.3	0.0	319.5	319.5
Thu-22	596.1	0.0	325.1	24.9	0.0	8.0	0.0	292.2	292.2
Fri-23	628.8	0.0	326.8	37.3	0.0	7.3	0.0	282.2	282.2
Sat-24	329.0	0.0	285.4	0.0	0.0	9.2	0.0	276.2	276.2
Sun-25	354.4	0.0	284.6	0.0	0.0	9.9	0.0	274.7	274.7
Mon-26	691.6	0.0	327.7	38.8	0.0	9.9	0.0	279.0	279.0
Tue-27	538.2	0.0	330.6	17.5	0.0	12.3	0.0	300.8	300.8
Wed-28	355.5	0.0	298.3	0.0	0.0	12.2	0.0	286.0	286.0
Thu-29	502.0	0.0	287.9	6.4	0.0	12.9	0.0	268.6	268.6
Fri-30	509.5	0.0	306.8	9.7	0.0	13.5	0.0	283.6	283.6
Sat-31	344.4	0.0	288.1	0.0	0.0	12.9	0.0	275.2	275.2
Average	424.1	0.0	287.9	7.7	0.0	8.2	0.0	271.9	271.9
Minimum	307.1	0.0	259.3	0.0	0.0	4.7	0.0	252.6	252.6
Maximum	691.6	0.0	351.2	38.8	0.0	13.5	0.0	319.5	319.5
GasMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	8,924	239	0	255	0	8,430	8,430

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
Thu-01	7.5			7.6	340				4.2	4.2
Fri-02	7.5			7.5	352				4.0	4.0
Sat-03	7.5			7.6	328				3.8	3.8
Sun-04	7.5			7.6	316				4.5	4.5
Mon-05	7.5			7.5	320				3.9	3.9
Tue-06	7.4			7.5	320				4.0	4.0
Wed-07	7.5			7.5	380				4.6	4.6
Thu-08	7.5			7.6	376				4.5	4.5
Fri-09	7.5			7.5	356				4.0	4.0
Sat-10	7.5			7.5	312				3.5	3.5
Sun-11	7.4	7.5		7.5	412	105			3.5	3.5
Mon-12	7.4	7.5		7.4	428	74			3.7	3.7
Tue-13	7.4			7.6	384				3.8	3.8
Wed-14	7.6	7.5		7.5	432	64			4.4	4.4
Thu-15	7.5	7.7		7.4	372	43			3.0	3.0
Fri-16	7.5			7.4	380				3.8	3.8
Sat-17	7.4			7.5	348				3.5	3.5
Sun-18	7.4			7.5	400				3.9	3.9
Mon-19	7.5			7.5	360				4.3	4.3
Tue-20	7.4	7.6		7.5	372	72			4.7	4.7
Wed-21	7.4	7.5		7.5	352	83			4.8	4.8
Thu-22	7.4	7.5		7.5	412	66			5.7	5.7
Fri-23	7.3	7.4		7.5	380	53			4.3	4.3
Sat-24	7.4			7.5	288				3.5	3.5
Sun-25	7.5			7.6	300				4.3	4.3
Mon-26	7.4	7.4		7.6	496	80			5.5	5.5
Tue-27	7.4	7.5		7.6	472	84			5.4	5.4
Wed-28	7.5			7.6	456				4.2	4.2
Thu-29	7.4	7.7		7.6	344	94			4.2	4.2
Fri-30	7.4			7.8	324				4.0	4.0
Sat-31	7.4			7.6	328				5.1	5.1
Average	7.4	7.5	---	7.5	369	74	---	---	4.2	4.2
Minimum	7.3	7.4	---	7.4	288	43	---	---	3.0	3.0
Maximum	7.6	7.7	---	7.8	496	105	---	---	6.1	6.1
GasMean	---	---	---	---	---	---	---	---	---	---
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	BOD_5 OUTFALL 10 FE	TP (mg/L) RAW	TP OUTFALL 30	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE
Thu-01	308				2	2	7.60				0.28	0.28
Fri-02	318				2	2	8.55				0.35	0.35
Sat-03	335				3	3	8.98				0.30	0.30
Sun-04	341				3	3	9.00				0.32	0.32
Mon-05	341				3	3	9.58				0.28	0.28
Tue-06	289				3	3	10.10				0.31	0.31
Wed-07	283				2	2	10.10				0.35	0.35
Thu-08	318				3	3	10.00				0.34	0.34
Fri-09	304				3	3	8.88				0.31	0.31
Sat-10	314				2	2	8.98				0.32	0.32
Sun-11	320	201			2	2	8.24	7.63			0.30	0.30
Mon-12	320	167			< 2	< 2	9.18	7.38			0.28	0.28
Tue-13	227				< 2	< 2	10.20				0.27	0.27
Wed-14	259	81			2	2	8.27	6.06			0.27	0.27
Thu-15	213	74			3	3	6.85	4.08			0.29	0.29
Fri-16	229				< 2	< 2	7.49				0.26	0.26
Sat-17	259				< 2	< 2	7.83				0.28	0.28
Sun-18	251				2	2	7.82				0.32	0.32
Mon-19	241				3	3	7.60				0.32	0.32
Tue-20	298	187			3	3	7.52	6.67			0.32	0.32
Wed-21	227	135			3	3	5.89	3.74			0.28	0.28
Thu-22	235	122			3	3	6.75	6.11			0.33	0.33
Fri-23	221	120			3	3	6.94	5.92			0.33	0.33
Sat-24	214				3	3	7.76				0.28	0.28
Sun-25	225				2	2	7.96				0.29	0.29
Mon-26	266	120			3	3	7.39	6.59			0.34	0.34
Tue-27	304	97			3	3	8.36	5.75			0.28	0.28
Wed-28	268				2	2	9.48				0.30	0.30
Thu-29	315	251			5	5	8.99	10.00			0.38	0.38
Fri-30	265				4	4	9.45				0.99	0.99
Sat-31	288				5	5	8.45				0.58	0.58
Average	277	141	---	---	2.8	2.8	8.37	6.36	---	---	0.34	0.34
Minimum	213	74	---	---	< 2	< 2	5.89	3.74	---	---	0.26	0.26
Maximum	341	251	---	---	5	5	10.20	10.00	---	---	0.99	0.99
GasMean	---	---	---	---	---	---	---	---	---	---	---	---
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	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
Thu-01	44.0				1.45	1.45				55.7			3.0
Fri-02	40.0				1.45	1.45				63.6			3.1
Sat-03	43.7				3.30	3.30				65.4			4.8
Sun-04	42.7				4.63	4.63				61.8			6.1
Mon-05	43.0				4.99	4.99				65.2			6.3
Tue-06	43.7				4.67	4.67				65.6			6.0
Wed-07	40.3				3.71	3.71				63.4			5.6
Thu-08	40.8				2.42	2.42				63.1			4.0
Fri-09	43.3				2.06	2.06				62.4			4.0
Sat-10	39.8				1.82	1.82				61.4			3.4
Sun-11	36.1	39.0			1.99	1.99				55.4	51.0		3.4
Mon-12	35.9	39.0			1.57	1.57				62.7	52.5		3.1
Tue-13	40.1				1.52	1.52				68.3			3.3
Wed-14	39.0	30.5			1.41	1.41				58.7	37.6		3.1
Thu-15	32.2	20.8			0.66	0.66				52.8	26.0		2.1
Fri-16	37.5				1.14	1.14				58.7			2.5
Sat-17	35.9				1.05	1.05				53.8			2.5
Sun-18	42.7				0.81	0.81				59.0			2.4
Mon-19	38.6				1.89	1.89				57.0			3.3
Tue-20	37.3	38.1			3.12	3.12				55.9	48.0		5.1
Wed-21	32.2	32.8			3.96	3.96				39.9	24.9		6.0
Thu-22	32.3	31.3			4.61	4.61				47.6	43.5		6.0
Fri-23	30.3	32.2			4.25	4.25				42.5	36.8		6.0
Sat-24	38.4				3.72	3.72				47.6			5.3
Sun-25	36.6				4.36	4.36				50.5			5.6
Mon-26	46.2	40.0			3.85	3.85				46.2	40.0		5.3
Tue-27	49.8	33.9			1.26	1.26				49.8	33.9		2.7
Wed-28	56.9				3.77	3.77				56.9			5.3
Thu-29	36.5	40.8			4.27	4.27				56.6	57.2		5.9
Fri-30	39.4				2.92	2.92				56.9			4.9
Sat-31	41.3				2.33	2.33				59.9			4.9
Average	38.4	32.8	---	---	2.74	2.74	---	---	---	56.9	41.0	---	4.3
Minimum	30.3	20.8	---	---	0.66	0.66	---	---	---	39.9	24.9	---	2.1
Maximum	44.0	40.8	---	---	4.99	4.99	---	---	---	68.3	57.2	---	6.3
GasMean	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NO_3+NO_2 (mg/L) RAW	NO_3+NO_2 OUTFALL 30	NO_3+NO_2 OUTFALL 20	NO_3+NO_2 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	E. coli OUTFALL 20	E. coli OUTFALL 10 FEC
Thu-01				8.2	93.9			97.9				8
Fri-02				8.6	96.1			98.4				10
Sat-03				10.1	90.4			98.2				9
Sun-04				10.1	92.3			95.5				8
Mon-05				10.0	91.7			91.8				14
Tue-06				9.1	93.6			98.1				16
Wed-07	< 0.01			10.8	93.8			97.3				17
Thu-08				11.3	88.7			98.1				8
Fri-09				11.8	89.0			96.1				5
Sat-10				11.0	82.1			98.7				14
Sun-11		0.13		11.1	84.8	91.3		90.8		1.9		8
Mon-12		0.08		9.6	89.6	94.3		90.3		1.9		9
Tue-13				10.8	85.7			86.8		1.8		19
Wed-14	< 0.01	0.27		12.1	89.3	75.2		90.2				9
Thu-15		0.36		10.9	80.5	73.9		90.6		1.9		15
Fri-16				9.9	90.5			86.9				15
Sat-17				9.0	83.0			90.2				8
Sun-18				8.8	83.5			89.0				13
Mon-19				10.0	84.1			87.9				8
Tue-20		0.09		8.9	88.2	89.6		88.6		2.1		35
Wed-21	< 0.01	0.07		7.5	77.5	76.6		86.4		1.7		12
Thu-22		0.05		7.4	81.2	74.1		85.3		1.8		95
Fri-23		0.07		7.4	78.1	79.8		87.3		2.3		36
Sat-24				6.8	83.7			84.9				24
Sun-25				8.8	82.6			86.7				9
Mon-26		0.07		8.0	89.7	66.5		87.0		1.6		9
Tue-27		0.03		7.9	80.2	75.7		87.6		2.1		18
Wed-28	< 0.01			9.2	86.9			88.8				29
Thu-29		0.15		9.2	85.3	64.8		94.2		2.7		18
Fri-30				9.3	82.8			91.7	2.6	1.5		9
Sat-31				9.5	85.2			90.8				5
Average	< 0.01	0.12	---	9.5	87	78	---	91.4				---
Minimum	< 0.01	0.03	---	6.8	77.5	65	---	84.9	2.6	1.5	---	5
Maximum	< 0.01	0.36	---	12.1	96	94	---	98.1	2.6	2.7	---	95
GasMean	---	---	---	---	---	---	---	---	2.6	1.9	---	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
49	49	100%	254	254	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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