Gold Bar Wastewater Treatment Plant
Plant Performance Report
September 2025

Digested Sludge: Total Monthly Volume (ML)	673

Volume of Flow (ML)

DATE	Peak Flow (ML/D)	Influent: INFs	Effluent: RAW	Non UV Disinfected: OUTFALL 30	Non UV Disinfected: OUTFALL 20	Non UV Disinfected: MPW	UV Disinfected: EPEPS	UV Disinfected: OUTFALL 10 FEC	UV Disinfected: OUTFALL 10 FE
Mon-01	367.5	0.0	287.5	0.0	0.0	11.7	0.0	275.8	275.8
Tue-02	361.3	0.0	292.1	0.0	0.0	11.5	0.0	280.6	280.6
Wed-03	356.6	0.0	295.9	0.0	0.0	11.6	0.0	284.3	284.3
Thu-04	328.8	0.0	286.6	0.0	0.0	12.4	0.0	274.2	274.2
Fri-05	319.2	0.0	286.9	0.0	0.0	10.9	0.0	276.0	276.0
Sat-06	324.0	0.0	281.4	0.0	0.0	10.6	0.0	270.8	270.8
Sun-07	362.0	0.0	284.8	0.0	0.0	10.7	0.0	274.1	274.1
Mon-08	352.9	0.0	296.5	0.0	0.0	10.3	0.0	286.2	286.2
Tue-09	339.8	0.0	286.5	0.0	0.0	10.3	0.0	276.2	276.2
Wed-10	334.4	0.0	287.0	0.0	0.0	9.3	0.0	277.7	277.7
Thu-11	328.8	0.0	284.3	0.0	0.0	8.7	0.0	275.6	275.6
Fri-12	324.4	0.0	287.1	0.0	0.0	9.9	0.0	277.2	277.2
Sat-13	327.6	0.0	291.0	0.0	0.0	9.4	0.0	271.6	271.6
Sun-14	368.2	0.0	282.4	0.0	0.0	8.8	0.0	273.6	273.6
Mon-15	355.1	0.0	291.4	0.0	0.0	8.8	0.0	282.6	282.6
Tue-16	325.3	0.0	291.5	0.0	0.0	9.1	0.0	272.4	272.4
Wed-17	328.9	0.0	290.4	0.0	0.0	9.9	0.0	270.5	270.5
Thu-18	327.0	0.0	279.8	0.0	0.0	8.8	0.0	271.0	271.0
Fri-19	326.2	0.0	281.1	0.0	0.0	8.4	0.0	272.7	272.7
Sat-20	322.1	0.0	274.4	0.0	0.0	8.9	0.0	265.5	265.5
Sun-21	351.7	0.0	278.3	0.0	0.0	9.1	0.0	269.2	269.2
Mon-22	335.5	0.0	283.2	0.0	0.0	8.9	0.0	274.3	274.3
Tue-23	325.3	0.0	278.9	0.0	0.0	9.9	0.0	269.0	269.0
Wed-24	329.1	0.0	276.9	0.0	0.0	8.2	0.0	268.7	268.7
Thu-25	326.8	0.0	271.0	0.0	0.0	9.8	0.0	261.2	261.2
Fri-26	319.8	0.0	270.9	0.0	0.0	9.7	0.0	261.2	261.2
Sat-27	330.4	0.0	272.8	0.0	0.0	9.7	0.0	263.1	263.1
Sun-28	347.0	0.0	282.0	0.0	0.0	9.0	0.0	273.0	273.0
Mon-29	331.7	0.0	287.5	0.0	0.0	9.3	0.0	278.2	278.2
Tue-30	348.2	0.0	281.1	0.0	0.0	10.4	0.0	270.7	270.7
Average	337.4	0.0	283.0	0.0	0.0	9.8	0.0	273.2	273.2
Minimum	319.2	0.0	270.9	0.0	0.0	8.2	0.0	261.2	261.2
Maximum	368.2	0.0	296.5	0.0	0.0	12.4	0.0	286.2	286.2
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	8,491	0	0	296	0	8,197	8,197

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
Mon-01	7.6			7.7	380				5.2	5.2
Tue-02	7.5			7.6	468				4.4	4.4
Wed-03	7.5			7.7	308				5.1	5.1
Thu-04	7.6			7.6	344				3.6	3.6
Fri-05	7.5			7.6	376				3.7	3.7
Sat-06	7.6			7.5	348				4.0	4.0
Sun-07	7.5			7.6	376				3.4	3.4
Mon-08	7.4			7.6	428				4.1	4.1
Tue-09	7.4			7.6	408				4.1	4.1
Wed-10	7.6			7.7	420				4.0	4.0
Thu-11	7.6			7.6	404				3.5	3.5
Fri-12	7.5			7.6	404				2.7	2.7
Sat-13	7.6			7.6	424				3.8	3.8
Sun-14	7.5			7.7	424				3.3	3.3
Mon-15	7.5			7.6	340				2.9	2.9
Tue-16	7.5			7.7	376				3.1	3.1
Wed-17	7.5			7.7	404				2.8	2.8
Thu-18	7.5			7.6	424				3.3	3.3
Fri-19	7.6			7.6	380				5.0	5.0
Sat-20	7.6			7.6	376				2.5	2.5
Sun-21	7.5			7.6	340				3.1	3.1
Mon-22	7.5			7.6	340				3.2	3.2
Tue-23	7.4			7.5	336				2.7	2.7
Wed-24	7.5			7.5	300				4.3	4.3
Thu-25	7.6			7.6	384				4.2	4.2
Fri-26	7.5			7.7	388				3.8	3.8
Sat-27	7.7			7.7	244				2.7	2.7
Sun-28	7.5			7.6	488				3.5	3.5
Mon-29	7.6			7.7	340				3.7	3.7
Tue-30	7.6			7.6	408				3.7	3.7
Average	7.5	---	---	7.6	379	---	---	---	3.6	3.6
Minimum	7.4	---	---	7.5	244	---	---	---	2.5	2.5
Maximum	7.7	---	---	7.7	488	---	---	---	5.2	5.2
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	BOD5/cBOD5 (mg/L) RAW BOD5	BOD5 OUTFALL 30 BOD5	BOD5 OUTFALL 20 BOD5	BOD5 EPEPS BOD5	BOD5 OUTFALL 10 cBOD5 FEC	BOD5 OUTFALL 10 cBOD5 FE	TP (mg/L) RAW	TP OUTFALL 30	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE
Mon-01	290				3	3	8.49				0.36	0.36
Tue-02	335				3	3	9.88				0.38	0.38
Wed-03	297				3	3	7.72				0.30	0.30
Thu-04	301				3	3	8.04				0.28	0.28
Fri-05	283				3	3	8.84				0.29	0.29
Sat-06	310				3	3	8.58				0.28	0.28
Sun-07	277				3	3	10.70				0.28	0.28
Mon-08	288				3	3	7.74				0.25	0.25
Tue-09	320				3	3	8.94				0.26	0.26
Wed-10	331				3	3	8.22				0.28	0.28
Thu-11	328				3	3	8.03				0.26	0.26
Fri-12	308				3	3	7.87				0.26	0.26
Sat-13	302				2	2	8.28				0.24	0.24
Sun-14	294				3	3	7.59				0.22	0.22
Mon-15	298				2	2	7.08				0.22	0.22
Tue-16	274				2	2	7.86				0.20	0.20
Wed-17	266				2	2	8.07				0.21	0.21
Thu-18	290				2	2	8.38				0.23	0.23
Fri-19	304				3	3	8.18				0.24	0.24
Sat-20	303				3	3	9.74				0.25	0.25
Sun-21	292				2	2	8.48				0.23	0.23
Mon-22	264				3	3	8.81				0.25	0.25
Tue-23	320				2	2	8.35				0.21	0.21
Wed-24	288				3	3	7.94				0.25	0.25
Thu-25	314				3	3	7.86				0.21	0.21
Fri-26	272				2	2	8.10				0.24	0.24
Sat-27	325				3	3	7.99				0.27	0.27
Sun-28	271				3	3	7.70				0.24	0.24
Mon-29	248				3	3	7.57				0.20	0.20
Tue-30	271				3	3	8.51				0.23	0.23
Average	295	---	---	---	3	3	8.32	---	---	---	0.25	0.25
Minimum	248	---	---	---	2	2	7.08	---	---	---	0.20	0.20
Maximum	335	---	---	---	3	3	10.70	---	---	---	0.38	0.38
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
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
Mon-01	38.4				1.31	1.31				60.0			2.7
Tue-02	39.4				1.26	1.26				74.4			3.0
Wed-03	39.0				0.42	0.42				61.3			2.0
Thu-04	39.0				0.63	0.63				61.8			2.0
Fri-05	40.2				0.68	0.68				69.9			2.0
Sat-06	40.3				0.81	0.81				65.0			2.4
Sun-07	41.4				1.08	1.08				84.4			2.5
Mon-08	40.3				1.01	1.01				64.0			2.7
Tue-09	43.3				0.92	0.92				66.2			2.4
Wed-10	43.0				0.95	0.95				65.5			2.3
Thu-11	40.2				0.82	0.82				64.2			2.3
Fri-12	39.5				0.85	0.85				60.9			2.3
Sat-13	40.0				0.90	0.90				57.3			2.2
Sun-14	39.3				1.07	1.07				58.8			2.5
Mon-15	38.7				0.90	0.90				57.2			2.3
Tue-16	42.1				0.57	0.57				59.8			2.0
Wed-17	42.0				0.65	0.65				61.9			2.0
Thu-18	41.6				0.82	0.82				69.9			2.2
Fri-19	42.0				0.66	0.66				62.4			2.2
Sat-20	41.2				0.74	0.74				69.4			2.0
Sun-21	40.9				1.01	1.01				65.1			2.3
Mon-22	40.7				1.05	1.05				65.1			2.4
Tue-23	42.3				0.89	0.89				62.3			2.2
Wed-24	43.3				1.10	1.10				66.8			2.9
Thu-25	40.6				1.14	1.14				65.6			2.6
Fri-26	42.6				1.19	1.19				60.8			2.5
Sat-27	42.7				1.22	1.22				60.3			2.5
Sun-28	43.3				1.42	1.42				60.0			2.7
Mon-29	41.1				1.64	1.64				61.4			3.3
Tue-30	41.4				1.12	1.12				66.5			2.5
Average	41.0	---	---	---	0.96	0.96	---	---	---	64.3	---	---	2.4
Minimum	38.4	---	---	---	0.42	0.42	---	---	---	57.2	---	---	2.0
Maximum	43.3	---	---	---	1.64	1.64	---	---	---	84.4	---	---	3.3
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---
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 X10^6	E. coli OUTFALL 30 X10^6	E. coli OUTFALL 20 X10^6	E. coli OUTFALL 10 FEC
Mon-01				10.9	82.5			85.0				4
Tue-02				9.6	86.5			84.9	4.8			14
Wed-03	< 0.01			8.3	87.4			89.8				6
Thu-04				8.1	85.5			89.7				8
Fri-05				8.7	82.6			87.7				4
Sat-06				8.6	79.2			89.4				9
Sun-07				8.0	72.9			80.0				5
Mon-08				7.2	81.2			79.2				6
Tue-09				8.2	75.8			84.9				7
Wed-10	< 0.01			8.6	72.3			81.8				11
Thu-11				8.1	77.3			86.1				15
Fri-12				8.3	71.4			81.4				4
Sat-13				8.3	79.9			86.4				4
Sun-14				8.1	71.7			77.3				4
Mon-15				7.5	85.0			79.2				7
Tue-16				8.4	86.4			86.8				5
Wed-17	< 0.01			9.3	74.3			83.5				8
Thu-18				9.5	85.1			87.7				10
Fri-19				10.1	84.3			88.3				4
Sat-20				10.4	72.0			86.8				4
Sun-21				9.6	72.3			81.6				9
Mon-22				9.2	84.6			79.6				4
Tue-23				9.8	77.1			89.0				5
Wed-24	< 0.15			10.3	78.8			86.3				2
Thu-25				10.3	79.3			84.8				6
Fri-26				10.6	67.8			86.0				7
Sat-27				10.0	79.2			83.6				6
Sun-28				9.9	77.5			80.5				3
Mon-29				9.2	80.7			78.3				6
Tue-30				10.5	81.3			84.9				6
Average	< 0.05	---	---	8.1	79.0	---	---	84.3				
Minimum	< 0.01	---	---	7.2	67.8	---	---	77.3	4.8	---	---	2
Maximum	< 0.15	---	---	10.9	87.4	---	---	89.8	4.8	---	---	15
GeoMean	---	---	---	---	---	---	---	---	4.8	---	---	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%	408	458	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 (INF + PE + EPE)
OUTFALL 30	Combined Bypass (INF + INFS + PE:30 + EPE)
MPW	Membrane Product Water (Effluent re-use water)
ML	Megalitre (1,000,000 Litre)
MPN	Most Probable Number
NR	Nil Result
NS	Nil Sample
INS	Insufficient Sample
AEP	Alberta Environment & Parks

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