PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
July 2025

Digested Sludge: Total Monthly Volume (ML)	69.5

Liquid Stream Quality

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent INFs	Influent RAW	Effluent 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
Tue-01	344.6	0.0	303.1	0.0	0.0	11.4	0.0	291.7	291.7
Wed-02	362.8	0.0	302.4	0.0	0.0	11.3	0.0	291.1	291.1
Thu-03	341.2	0.0	293.6	0.0	0.0	10.8	0.0	282.8	282.8
Fri-04	323.3	0.0	289.0	0.0	0.0	11.5	0.0	277.5	277.5
Sat-05	331.3	0.0	281.6	0.0	0.0	11.7	0.0	269.9	269.9
Sun-06	947.7	0.0	508.2	178.0	0.0	11.3	0.0	318.9	318.9
Mon-07	397.1	0.0	324.6	3.6	0.0	11.9	0.0	309.1	309.1
Tue-08	351.6	0.0	313.0	0.0	0.0	11.2	0.0	301.8	301.8
Wed-09	356.8	0.0	298.3	0.0	0.0	11.4	0.0	286.9	286.9
Thu-10	340.4	0.0	294.4	0.0	0.0	11.1	0.0	283.3	283.3
Fri-11	333.0	0.0	288.0	0.0	0.0	11.1	0.0	276.9	276.9
Sat-12	311.0	0.0	285.2	0.0	0.0	11.3	0.0	273.9	273.9
Sun-13	326.9	0.0	295.7	0.0	0.0	11.7	0.0	284.0	284.0
Mon-14	331.5	0.0	292.1	0.0	0.0	12.1	0.0	280.0	280.0
Tue-15	319.9	0.0	295.3	0.0	0.0	13.9	0.0	281.4	281.4
Wed-16	367.0	0.0	290.3	0.0	0.0	13.2	0.0	277.1	277.1
Thu-17	312.6	0.0	284.1	0.0	0.0	13.0	0.0	271.1	271.1
Fri-18	337.2	0.0	294.9	0.0	0.0	12.1	0.0	282.8	282.8
Sat-19	896.3	0.0	457.6	166.1	0.0	12.5	0.0	279.0	279.0
Sun-20	398.8	0.0	340.1	11.9	0.0	12.3	0.0	315.9	315.9
Mon-21	357.0	0.0	317.8	0.0	0.0	11.8	0.0	306.0	306.0
Tue-22	355.2	0.0	298.4	0.0	0.0	12.5	0.0	285.9	285.9
Wed-23	354.7	0.0	294.9	0.0	0.0	12.5	0.0	282.4	282.4
Thu-24	358.7	0.0	287.4	0.0	0.0	11.1	0.0	276.3	276.3
Fri-25	1,440.5	0.0	445.9	100.4	0.0	11.4	0.0	334.1	334.1
Sat-26	399.7	0.0	298.7	0.0	0.0	11.5	0.0	287.2	287.2
Sun-27	607.6	0.0	325.2	18.8	0.0	11.1	0.0	295.3	295.3
Mon-28	345.3	0.0	310.0	0.0	0.0	11.3	0.0	298.7	298.7
Tue-29	349.3	0.0	297.7	0.0	0.0	11.2	0.0	286.5	286.5
Wed-30	351.1	0.0	299.8	0.0	0.0	12.2	0.0	287.6	287.6
Thu-31	357.8	0.0	301.7	0.0	0.0	12.0	0.0	289.7	289.7
Average	429.3	0.0	316.4	15.4	0.0	11.8	0.0	289.2	289.2
Minimum	311.0	0.0	281.6	0.0	0.0	10.8	0.0	269.9	269.9
Maximum	1,440.5	0.0	508.2	178.0	0.0	13.9	0.0	334.1	334.1
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	9,809	479	0	365	0	8,965	8,965

pH@25°C and TSS (mg/L)

DATE	pH RAW	pH OUTFALL 30	pH OUTFALL 20	pH OUTFALL 10 FEC	TSS RAW	TSS OUTFALL 30	TSS OUTFALL 20	TSS EPEPS	TSS OUTFALL 10 FEC	TSS OUTFALL 10 FE
Tue-01	7.6			7.8	392				8.2	8.2
Wed-02	7.5			7.9	276				9.0	9.0
Thu-03	7.5			7.7	300				6.9	6.9
Fri-04	7.7			7.6	268				10.9	10.9
Sat-05	7.4			7.6	328				7.6	7.6
Sun-06	7.4	7.5		7.6	332	46			5.3	5.3
Mon-07	7.6	7.9		7.7	248	65			5.9	5.9
Tue-08	7.6			7.7	260				6.7	6.7
Wed-09	7.6			7.7	300				7.1	7.1
Thu-10	7.5			7.7	336				5.9	5.9
Fri-11	7.5			7.7	344				6.5	6.5
Sat-12	7.6			7.7	344				5.9	5.9
Sun-13	7.5			7.6	360				5.2	5.2
Mon-14	7.5			7.7	384				4.3	4.3
Tue-15	7.6			7.7	372				6.2	6.2
Wed-16	7.6			7.6	268				4.6	4.6
Thu-17	7.5			7.7	336				5.2	5.2
Fri-18	7.4			7.6	328				7.0	7.0
Sat-19	7.3	7.5		7.5	340	62			6.6	6.6
Sun-20	7.4	7.5		7.4	336	52			5.3	5.3
Mon-21	7.6			7.5	316				6.3	6.3
Tue-22	7.5			7.7	384				5.7	5.7
Wed-23	7.5			7.7	360				5.7	5.7
Thu-24	7.6			7.8	352				5.7	5.7
Fri-25	7.3	7.5		7.6	312	88			4.7	4.7
Sat-26	7.4			7.5	380				5.6	5.6
Sun-27	7.5	7.7		7.6	388	108			6.2	6.2
Mon-28	7.5			7.5	356				6.2	6.2
Tue-29	7.5			7.7	308				6.3	6.3
Wed-30	7.7			7.9	312				6.2	6.2
Thu-31	7.5			7.7	280				5.8	5.8
Average	7.5	7.6	---	7.6	329	70	---	---	6.3	6.3
Minimum	7.3	7.5	---	7.4	248	46	---	---	4.3	4.3
Maximum	7.7	7.9	---	7.9	392	108	---	---	10.9	10.9
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

BOD_5/cBOD_5 (mg/L) and TP (mg/L)

DATE	RAW BOD_5	OUTFALL 30 BOD_5	OUTFALL 20 BOD_5	EPEPS BOD_5	OUTFALL 10 FEC cBOD_5	OUTFALL 10 FE cBOD_5	TP RAW	TP OUTFALL 30	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE
Tue-01	276				5	5	7.72				0.57	0.57
Wed-02	276				5	5	7.76				0.50	0.50
Thu-03	227				4	4	7.83				0.50	0.50
Fri-04	227				5	5	6.70				0.37	0.37
Sat-05	268				4	4	7.75				0.44	0.44
Sun-06	177	73			4	4	4.59	4.36			0.38	0.38
Mon-07	317	94			5	5	6.46	6.20			0.34	0.34
Tue-08	249				7	7	6.64				0.41	0.41
Wed-09	290				8	8	7.37				0.39	0.39
Thu-10	303				9	9	7.73				0.38	0.38
Fri-11	303				10	10	7.58				0.56	0.56
Sat-12	286				8	8	7.28				1.11	1.11
Sun-13	260				9	9	7.87				0.65	0.65
Mon-14	344				9	9	8.21				0.49	0.49
Tue-15	270				7	7	8.64				0.40	0.40
Wed-16	235				6	6	8.13				0.34	0.34
Thu-17	305				7	7	9.63				0.53	0.53
Fri-18	235				6	6	9.20				0.47	0.47
Sat-19	220	114			5	5	6.57	6.98			0.47	0.47
Sun-20	156	76			4	4	7.36	7.06			0.41	0.41
Mon-21	261				5	5	8.39				0.44	0.44
Tue-22	258				6	6	9.86				0.41	0.41
Wed-23	261				5	5	8.95				0.44	0.44
Thu-24	221				5	5	9.39				0.43	0.43
Fri-25	169	91			4	4	5.01	4.96			0.37	0.37
Sat-26	163				4	4	8.54				0.39	0.39
Sun-27	248	86			4	4	7.41	9.24			0.44	0.44
Mon-28	268				4	4	7.88				0.74	0.74
Tue-29	279				4	4	7.79				0.48	0.48
Wed-30	253				3	3	7.58				0.40	0.40
Thu-31	217				3	3	7.48				0.38	0.38
Average	252	89	---	---	6	6	7.72	6.47	---	---	0.47	0.47
Minimum	156	73	---	---	3	3	4.59	4.36	---	---	0.34	0.34
Maximum	344	114	---	---	10	10	9.86	9.24	---	---	1.11	1.11
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

NH3-N (mg/L) and un-ionized NH3-N (mg/L)

DATE	NH3-N RAW	NH3-N OUTFALL 30	NH3-N OUTFALL 20	NH3-N EPEPS	NH3-N OUTFALL 10 FEC	NH3-N OUTFALL 10 FE	un-ionized OUT-FAL 30	un-ionized OUT-FAL 20	un-ionized OUT-FAL 10
Tue-01	34.1				1.21	1.21			
Wed-02	36.4				1.77	1.77			
Thu-03	40.9				1.83	1.83			
Fri-04	39.9				1.68	1.68			
Sat-05	40.2				1.61	1.61			
Sun-06	20.8	28.6			0.78	0.78			
Mon-07	33.7	36.9			0.77	0.77			
Tue-08	35.2				1.26	1.26			
Wed-09	35.7				1.02	1.02			
Thu-10	39.1				1.03	1.03			
Fri-11	36.2				0.87	0.87			
Sat-12	33.5				0.41	0.41			
Sun-13	34.9				0.58	0.58			
Mon-14	36.6				0.68	0.68			
Tue-15	38.1				0.73	0.73			
Wed-16	36.8				1.17	1.17			
Thu-17	36.8				2.57	2.57			
Fri-18	37.1				0.74	0.74			
Sat-19	20.8	31.2			0.37	0.37			
Sun-20	31.0	33.9			0.55	0.55			
Mon-21	35.8				0.80	0.80			
Tue-22	38.6				0.70	0.70			
Wed-23	38.3				0.70	0.70			
Thu-24	37.9				0.72	0.72			
Fri-25	20.1	20.5			0.49	0.49			
Sat-26	35.5				0.65	0.65			
Sun-27	33.9	43.0			0.49	0.49			
Mon-28	36.6				0.27	0.27			
Tue-29	35.8				0.24	0.24			
Wed-30	35.0				0.26	0.26			
Thu-31	34.6				0.24	0.24			
Average	34.8	32.4	---	---	0.88	0.88	---	---	---
Minimum	20.1	20.5	---	---	0.24	0.24	---	---	---
Maximum	40.9	43.0	---	---	2.57	2.57	---	---	---
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

TKN (mg/L) and NO_2+NO_3 (mg/L)

DATE	TKN RAW	TKN OUTFALL 30	TKN OUTFALL 20	TKN OUTFALL 10 FEC	NO_2+NO_3 RAW	NO_2+NO_3 OUTFALL 30	NO_2+NO_3 OUTFALL 20	NO_2+NO_3 OUTFALL 10 FEC
Tue-01	55.3			3.4				9.7
Wed-02	62.3			3.8	< 0.01			10.0
Thu-03	57.9			4.3				9.7
Fri-04	52.8			3.0				10.9
Sat-05	58.9			3.3				11.5
Sun-06	32.0	33.0		2.4		0.05		8.1
Mon-07	48.3	43.2		1.9		0.04		10.5
Tue-08	49.0			2.9				11.2
Wed-09	50.3			3.1	< 0.01			10.4
Thu-10	60.6			2.9				11.4
Fri-11	53.8			2.6				11.8
Sat-12	48.1			2.3				10.7
Sun-13	55.4			2.2				11.2
Mon-14	58.1			2.8				10.6
Tue-15	61.7			2.8				10.4
Wed-16	60.8			3.5	< 0.01			11.2
Thu-17	63.1			5.2				8.6
Fri-18	60.6			3.0				11.1
Sat-19	39.0	37.8		2.6		0.04		9.3
Sun-20	50.2	41.7		2.3		0.34		7.7
Mon-21	55.3			2.5				11.2
Tue-22	60.8			2.6				11.6
Wed-23	62.7			2.8	< 0.01			12.0
Thu-24	60.4			3.0				12.8
Fri-25	31.2	25.4		2.5		0.18		9.5
Sat-26	57.7			2.4				13.0
Sun-27	52.9	55.9		2.4		0.08		12.7
Mon-28	57.6			2.2				12.0
Tue-29	56.0			2.3				11.5
Wed-30	55.4			2.2	< 0.01			10.2
Thu-31	53.1			2.3				9.8
Average	54.2	39.5	---	2.8	< 0.01	0.12	---	10.7
Minimum	31.2	25.4	---	1.9	< 0.01	0.04	---	7.7
Maximum	63.1	55.9	---	5.2	< 0.01	0.34	---	13.0
GeoMean	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---

Chloride (mg/L) and *E. coli* (Counts/100 mL)

DATE	Chloride RAW	Chloride OUTFALL 30	Chloride OUTFALL 20	Chloride OUTFALL 10 FEC	E. coli RAW X10^6	E. coli OUTFALL 30 X10^6	E. coli OUTFALL 20 X10^6	E. coli OUTFALL 10 FEC
Tue-01	93.9			102				10
Wed-02	102			99.8				10
Thu-03	96.6			108				6
Fri-04	96.2			109				17
Sat-05	89.3			108				8
Sun-06	57.8	65.8		85.7		> 80.0		9
Mon-07	89.7	86.8		81.0		1.5		20
Tue-08	95.4			98.7				25
Wed-09	101			104				20
Thu-10	102			109				31
Fri-11	97.3			108				14
Sat-12	93.8			103				3
Sun-13	91.6			98.0				6
Mon-14	98.0			98.1				7
Tue-15	95.5			102				11
Wed-16	96.8			99.4				8
Thu-17	101			102				11
Fri-18	95.6			107				19
Sat-19	60.3	63.5		96.6		1.9		6
Sun-20	73.2	62.7		66.9		2.0		12
Mon-21	79.8			82.7				19
Tue-22	86.8			96.1				33
Wed-23	88.5			94.2				16
Thu-24	91.6			98.6				7
Fri-25	55.6	48.2		82.3		1.1		10
Sat-26	78.8			87.3				4
Sun-27	75.9	71.8		88.8		2.0		3
Mon-28	79.6			81.7				12
Tue-29	82.9			86.2				5
Wed-30	84.0			87.7				8
Thu-31	83.0			88.4				4
Average	87.5	66.5	---	95.5			---	
Minimum	55.6	48.2	---	66.9	---	1.1	---	3
Maximum	102	86.8	---	109	---	> 80.0	---	33
GeoMean	---	---	---	---	---	3.2	---	10
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
55	55	100%	403	403	100%

Report Comments

6-Jul-25	Outfall 30 E. Coli results significantly higher than average due to suspected laboratory dilution error. Unable to retest.

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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