PROVIDING HOME EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
March 2025

Digested Sludge: Total Monthly Volume (ML)	73.0

Volume of Flow (ML)

DATE	Peak Flow (ML/D)	Influent	Effluent						
			Non UV Disinfected				UV Disinfected		
		INFs	OUTFALL 30	OUTFALL 20	WPW	EPBPS	OUTFALL 10		
							FEC	FE	
Sat-01	680.7	0.0	381.9	68.0	0.0	12.0	0.0	301.9	301.9
Sun-02	609.4	0.0	368.9	67.7	0.0	12.4	0.0	288.8	288.8
Mon-03	468.8	0.0	332.3	24.6	0.0	12.0	0.0	295.7	295.7
Tue-04	414.5	0.0	313.4	0.0	0.0	12.1	0.0	301.3	301.3
Wed-05	394.5	0.0	299.4	0.0	0.0	12.2	0.0	287.2	287.2
Thu-06	429.7	0.0	303.3	14.3	0.0	12.3	0.0	276.7	276.7
Fri-07	447.0	0.0	304.7	15.3	0.0	12.0	0.0	277.4	277.4
Sat-08	451.9	0.0	302.5	22.3	0.0	12.0	0.0	268.2	268.2
Sun-09	639.3	0.0	348.8	69.6	0.0	11.4	0.0	267.8	267.8
Mon-10	417.4	0.0	317.0	4.1	0.0	11.7	0.0	301.2	301.2
Tue-11	362.7	0.0	297.3	0.0	0.0	12.0	0.0	285.3	285.3
Wed-12	350.5	0.0	283.4	0.0	0.0	12.2	0.0	271.2	271.2
Thu-13	339.0	0.0	275.3	0.0	0.0	11.9	0.0	263.4	263.4
Fri-14	333.7	0.0	275.6	0.0	0.0	12.0	0.0	263.6	263.6
Sat-15	332.6	0.0	274.3	0.0	0.0	12.4	0.0	261.9	261.9
Sun-16	386.0	0.0	276.1	0.0	0.0	12.1	0.0	264.0	264.0
Mon-17	372.5	0.0	291.0	0.0	0.0	11.7	0.0	279.3	279.3
Tue-18	420.3	0.0	292.2	10.2	0.0	12.3	0.0	269.7	269.7
Wed-19	414.9	0.0	299.8	0.6	0.0	12.3	0.0	286.9	286.9
Thu-20	401.0	0.0	286.5	0.0	0.0	11.7	0.0	274.8	274.8
Fri-21	398.1	0.0	297.7	0.0	0.0	11.7	0.0	286.0	286.0
Sat-22	446.9	0.0	287.6	10.7	0.0	11.9	0.0	265.0	265.0
Sun-23	400.5	0.0	287.7	0.0	0.0	11.7	0.0	276.0	276.0
Mon-24	413.5	0.0	301.0	0.0	0.0	11.5	0.0	289.5	289.5
Tue-25	373.6	0.0	293.3	0.0	0.0	12.1	0.0	281.2	281.2
Wed-26	386.1	0.0	285.3	0.0	0.0	12.0	0.0	273.3	273.3
Thu-27	591.1	0.0	366.9	45.5	0.0	11.7	0.0	309.7	309.7
Fri-28	387.7	0.0	302.2	1.0	0.0	10.9	0.0	290.3	290.3
Sat-29	411.9	0.0	296.1	0.0	0.0	12.3	0.0	283.8	283.8
Sun-30	416.9	0.0	306.0	0.0	0.0	11.6	0.0	294.4	294.4
Mon-31	511.1	0.0	338.4	41.4	0.0	11.1	0.0	285.9	285.9
Average	430.4	0.0	306.0	12.8	0.0	11.9	0.0	281.3	281.3
Minimum	332.6	0.0	274.3	0.0	0.0	10.9	0.0	261.9	261.9
Maximum	680.7	0.0	381.9	69.6	0.0	12.4	0.0	309.7	309.7
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	9,486	395	0	369	0	8,721	8,721

Liquid Stream Quality

pH@25°C

DATE	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10
				FEC
Sat-01	7.3	7.4		7.3
Sun-02	7.5	7.5		7.4
Mon-03	7.5	7.5		7.5
Tue-04	7.5			7.5
Wed-05	7.6			7.6
Thu-06	7.4	7.5		7.6
Fri-07	7.4	7.6		7.5
Sat-08	7.4	7.6		7.5
Sun-09	7.3	7.5		7.2
Mon-10	7.3			7.3
Tue-11	7.3			7.4
Wed-12	7.4			7.2
Thu-13	7.5			7.4
Fri-14	7.5			7.5
Sat-15	7.5			7.4
Sun-16	7.4			7.4
Mon-17	7.3			7.6
Tue-18	7.3	7.4		7.4
Wed-19	7.5			7.5
Thu-20	7.4			7.4
Fri-21	7.4			7.4
Sat-22	7.5	7.6		7.6
Sun-23	7.4			7.3
Mon-24	7.4			7.4
Tue-25	7.3			7.4
Wed-26	7.4			7.3
Thu-27	7.4	7.5		7.3
Fri-28	7.4	7.6		7.4
Sat-29	7.3			7.4
Sun-30	7.4			7.3
Mon-31	7.4	7.4		7.3
Average	7.4	7.5	---	7.4
Minimum	7.3	7.4	---	7.2
Maximum	7.6	7.8	---	7.6
GeoMean	---	---	---	---
TOTAL	---	---	---	---

TSS (mg/L)

DATE	RAW	OUTFALL 30	OUTFALL 20	EPBPS	OUTFALL 10	
					FEC	FE
Sat-01	352	96			2.6	2.6
Sun-02	256	86			2.6	2.6
Mon-03	284	75			2.9	2.9
Tue-04	344				1.2	1.2
Wed-05	340				3.1	3.1
Thu-06	252	104			2.9	2.9
Fri-07	264	69			2.2	2.2
Sat-08	280	85			2.9	2.9
Sun-09	308	110			2.8	2.8
Mon-10	252				3.0	3.0
Tue-11	260				2.7	2.7
Wed-12	254				3.7	3.7
Thu-13	376				4.0	4.0
Fri-14	272				2.8	2.8
Sat-15	203				3.5	3.5
Sun-16	240				4.1	4.1
Mon-17	308				3.6	3.6
Tue-18	312	87			4.0	4.0
Wed-19	324				4.3	4.3
Thu-20	284				3.4	3.4
Fri-21	280				4.9	4.9
Sat-22	264	103			4.1	4.1
Sun-23	68				3.9	3.9
Mon-24	280				4.7	4.7
Tue-25	280				4.0	4.0
Wed-26	288				3.7	3.7
Thu-27	340	67			3.8	3.8
Fri-28	284	90			4.8	4.8
Sat-29	232				4.2	4.2
Sun-30	256				5.5	5.5
Mon-31	336	103			5.2	5.2
Average	308	144	---	---	3.8	3.8
Minimum	68	67	---	---	1.2	1.2
Maximum	376	110	---	---	5.5	5.5
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

BOD_5/cBOD$_5$ (mg/L)

DATE	RAW	OUTFALL 30	OUTFALL 20	EPBPS	OUTFALL 10	
					FEC	FE
Sat-01	270	116			0.25	0.25
Sun-02	311	121			0.23	0.23
Mon-03	293	151			0.26	0.26
Tue-04	341				0.28	0.28
Wed-05	340				0.31	0.31
Thu-06	290	163			0.26	0.26
Fri-07	292	142			0.23	0.23
Sat-08	293	133			0.24	0.24
Sun-09	275	124			0.22	0.22
Mon-10	293				0.23	0.23
Tue-11	302				0.27	0.27
Wed-12	336				0.26	0.26
Thu-13	344				0.30	0.30
Fri-14	341				0.30	0.30
Sat-15	257				0.33	0.33
Sun-16	305				0.31	0.31
Mon-17	286				0.33	0.33
Tue-18	329	162			0.31	0.31
Wed-19	339				0.50	0.50
Thu-20	337				0.34	0.34
Fri-21	264				0.34	0.34
Sat-22	358	181			0.33	0.33
Sun-23	169				0.30	0.30
Mon-24	328				0.33	0.33
Tue-25	277				0.30	0.30
Wed-26	323				0.32	0.32
Thu-27	310	152			0.30	0.30
Fri-28	315	142			0.25	0.25
Sat-29	335				0.32	0.32
Sun-30	295				0.33	0.33
Mon-31	329	144			0.32	0.32
Average	308	144	---	---	0.30	0.30
Minimum	169	116	---	---	0.22	0.22
Maximum	358	181	---	---	0.50	0.50
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

cBOD$_5$ (mg/L)

DATE	OUTFALL 10	
	FEC	FE
Sat-01	2	2
Sun-02	3	3
Mon-03	3	3
Tue-04	3	3
Wed-05	3	3
Thu-06	< 2	< 2
Fri-07	2	2
Sat-08	2	2
Sun-09	2	2
Mon-10	2	2
Tue-11	3	3
Wed-12	3	3
Thu-13	3	3
Fri-14	3	3
Sat-15	3	3
Sun-16	3	3
Mon-17	3	3
Tue-18	3	3
Wed-19	3	3
Thu-20	3	3
Fri-21	3	3
Sat-22	3	3
Sun-23	2	2
Mon-24	3	3
Tue-25	3	3
Wed-26	2	2
Thu-27	3	3
Fri-28	3	3
Sat-29	3	3
Sun-30	3	3
Mon-31	3	3
Average	3	3
Minimum	2	2
Maximum	3	3
GeoMean	---	---
TOTAL	---	---

TP (mg/L)

DATE	RAW	OUTFALL 30	OUTFALL 20	EPBPS	OUTFALL 10	
					FEC	FE
Sat-01	6.97	7.04			0.25	0.25
Sun-02	6.11	7.38			0.23	0.23
Mon-03	7.06	8.52			0.26	0.26
Tue-04	8.02				0.28	0.28
Wed-05	8.60				0.31	0.31
Thu-06	7.92	8.54			0.26	0.26
Fri-07	8.13	8.20			0.23	0.23
Sat-08	8.50	8.73			0.24	0.24
Sun-09	6.40	7.31			0.22	0.22
Mon-10	7.17				0.23	0.23
Tue-11	8.56				0.27	0.27
Wed-12	8.60				0.26	0.26
Thu-13	8.54				0.30	0.30
Fri-14	8.46				0.30	0.30
Sat-15	8.27				0.33	0.33
Sun-16	8.28				0.31	0.31
Mon-17	8.27				0.33	0.33
Tue-18	8.09	8.67			0.31	0.31
Wed-19	7.79				0.50	0.50
Thu-20	8.10				0.34	0.34
Fri-21	8.35				0.34	0.34
Sat-22	8.15	9.95			0.33	0.33
Sun-23	9.44				0.30	0.30
Mon-24	8.10				0.33	0.33
Tue-25	8.00				0.30	0.30
Wed-26	9.90				0.32	0.32
Thu-27	7.34	7.74			0.30	0.30
Fri-28	7.71	7.68			0.25	0.25
Sat-29	7.37				0.32	0.32
Sun-30	7.92				0.33	0.33
Mon-31	9.01	7.26			0.32	0.32
Average	7.96	8.09	---	---	0.30	0.30
Minimum	6.11	7.04	---	---	0.22	0.22
Maximum	9.90	9.95	---	---	0.50	0.50
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

NH3-N (mg/L)

DATE	RAW	OUTFALL 30	OUTFALL 20	EPBPS	OUTFALL 10	
					FEC	FE
Sat-01	29.0	33.6			6.62	6.62
Sun-02	32.2	37.9			5.33	5.33
Mon-03	30.4	44.5			5.50	5.50
Tue-04	38.0				8.68	8.68
Wed-05	41.4				9.76	9.76
Thu-06	40.7	44.3			9.49	9.49
Fri-07	40.8	45.7			7.24	7.34
Sat-08	42.0	45.9			6.00	6.00
Sun-09	31.8	31.2			3.61	3.61
Mon-10	39.8				3.90	3.90
Tue-11	41.9				6.87	6.87
Wed-12	43.7				5.74	5.74
Thu-13	44.5				5.75	5.75
Fri-14	43.8				5.10	5.10
Sat-15	45.3				5.03	5.03
Sun-16	43.3				5.48	5.48
Mon-17	41.0				5.34	5.34
Tue-18	40.6	43.9			4.32	4.32
Wed-19	40.4				6.72	6.72
Thu-20	39.7				7.86	7.86
Fri-21	40.1				6.39	6.39
Sat-22	41.8	46.4			5.69	5.69
Sun-23	30.7				4.52	4.52
Mon-24	37.7				5.24	5.24
Tue-25	41.2				4.27	4.27
Wed-26	41.2				3.15	3.15
Thu-27	31.6	39.5			2.94	2.94
Fri-28	41.2	39.7			6.21	6.21
Sat-29	40.3				6.03	6.03
Sun-30	38.4				5.59	5.59
Mon-31	35.6	39.2			4.16	4.16
Average	38.2	41.0	---	---	5.76	5.76
Minimum	29.0	31.2	---	---	2.94	2.94
Maximum	45.3	46.4	---	---	9.76	9.76
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

un-ionized NH3-N (mg/L)

DATE	OUTFALL 30	OUTFALL 20	OUTFALL 10
			FEC
Sat-01			
Sun-02			
Mon-03			
Tue-04			
Wed-05			
Thu-06			
Fri-07			
Sat-08			
Sun-09			
Mon-10			
Tue-11			
Wed-12			
Thu-13			
Fri-14			
Sat-15			
Sun-16			
Mon-17			
Tue-18			
Wed-19			
Thu-20			
Fri-21			
Sat-22			
Sun-23			
Mon-24			
Tue-25			
Wed-26			
Thu-27			
Fri-28			
Sat-29			
Sun-30			
Mon-31			
Average	---	---	---
Minimum	---	---	---
Maximum	---	---	---
GeoMean	---	---	---
TOTAL	---	---	---

TKN (mg/L)

DATE	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10
				FEC
Sat-01	36.9	39.3		4.0
Sun-02	35.9	41.9		7.4
Mon-03	45.7	55.4		7.1
Tue-04	49.7			8.9
Wed-05	52.4			10.0
Thu-06	52.0	52.4		8.0
Fri-07	51.8	50.6		6.0
Sat-08	53.0	52.2		6.0
Sun-09	40.9	40.9		3.5
Mon-10	51.0			5.6
Tue-11	54.2			9.6
Wed-12	53.4			5.4
Thu-13	56.0			5.1
Fri-14	53.6			17.6
Sat-15	51.6			18.6
Sun-16	54.2			17.4
Mon-17	51.8			69.3
Tue-18	56.4	61.7		5.7
Wed-19	58.0			8.4
Thu-20	58.4			9.6
Fri-21	55.9			6.8
Sat-22	57.0	59.1		7.4
Sun-23	37.1			2.8
Mon-24	56.3			7.0
Tue-25	60.2			5.7
Wed-26	62.4			5.4
Thu-27	48.6	49.1		4.7
Fri-28	60.0	50.3		6.4
Sat-29	57.3			7.8
Sun-30	58.1			7.5
Mon-31	49.4	46.8		5.7
Average	52.2	50.0	---	9.7
Minimum	35.9	39.3	---	2.8
Maximum	62.4	61.7	---	69.3
GeoMean	---	---	---	---
TOTAL	---	---	---	---

NO_3+NO_2 (mg/L)

DATE	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10
				FEC
Sat-01		0.06		7.5
Sun-02		0.06		7.7
Mon-03		0.06		7.9
Tue-04				7.8
Wed-05				8.4
Thu-06		0.06		9.3
Fri-07		0.02		10.4
Sat-08		0.04		11.2
Sun-09		0.22		11.7
Mon-10				10.0
Tue-11				10.0
Wed-12	< 0.01			10.8
Thu-13				11.9
Fri-14				12.1
Sat-15				12.8
Sun-16				12.8
Mon-17				11.4
Tue-18		0.10		11.3
Wed-19				9.7
Thu-20				10.5
Fri-21				10.6
Sat-22		0.03		11.0
Sun-23				12.6
Mon-24				10.6
Tue-25				10.9
Wed-26	* 0.01			11.3
Thu-27		0.10		9.7
Fri-28		0.05		9.5
Sat-29				9.3
Sun-30				8.9
Mon-31		0.10		8.8
Average	* 0.01	0.07	---	10.3
Minimum	< 0.01	0.02	---	7.5
Maximum	* 0.01	0.22	---	12.8
GeoMean	---	---	---	---
TOTAL	---	---	---	---

Chloride (mg/L)

DATE	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10
				FEC
Sat-01	176	219		182
Sun-02	140	173		167
Mon-03	125	150		137
Tue-04	115			130
Wed-05	106			119
Thu-06	102	123		116
Fri-07	101	117		113
Sat-08	97	109		111
Sun-09	132	151		118
Mon-10	135			129
Tue-11	109			144
Wed-12	96.4			125
Thu-13	97.2			108
Fri-14	117			111
Sat-15	108			127
Sun-16	95.3			115
Mon-17	166			112
Tue-18	157	245		178
Wed-19	127			164
Thu-20	117			142
Fri-21	136			134
Sat-22	118	117		121
Sun-23	103			108
Mon-24	108			108
Tue-25	107			113
Wed-26	108			113
Thu-27	224	283		165
Fri-28	229	226		223
Sat-29	93.3			235
Sun-30	89.9			228
Mon-31	173	250		199
Average	132	180	---	142
Minimum	95.3	109	---	108
Maximum	229	283	---	235
GeoMean	---	---	---	---
TOTAL	---	---	---	---

E. coli (Counts/100 mL)

DATE	RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10
	X10^6	X10^6	X10^6	FEC
Sat-01		1.0		20
Sun-02		1.3		5
Mon-03		0.8		< 10
Tue-04				20
Wed-05				20
Thu-06		2.8		7
Fri-07		2.3		6
Sat-08		3.2		4
Sun-09		2.3		3
Mon-10		1.5		9
Tue-11	2.4			14
Wed-12				6
Thu-13	2.4			7
Fri-14				7
Sat-15				4
Sun-16				6
Mon-17				10
Tue-18		3.0		10
Wed-19		2.5		10
Thu-20				11
Fri-21				4
Sat-22		1.9		11
Sun-23				12
Mon-24				10
Tue-25				13
Wed-26				11
Thu-27		1.5		12
Fri-28		1.7		17
Sat-29				8
Sun-30				12
Mon-31		2.3		27
Average	---	---	---	---
Minimum	---	---	---	---
Maximum	---	---	---	---
GeoMean	2.4	1.9	---	9
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
107	107	100%	184	184	100%

Report Comments

Micro samples for March 1 to March 5, 2025 were subcontracted. Results are suspected to be biased high.
TKN Samples for March 14 to March 17 2025 were subcontracted and are outside of historical norms. Results are suspected to be biased high.

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
Alberta Environment & Parks

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