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 INFs	Influent RAW	Effluent Non UV Disinfected OUTFALL 30	Effluent Non UV Disinfected OUTFALL 20	Effluent Non UV Disinfected WPW	Effluent Non UV Disinfected EPBPS	Effluent UV Disinfected OUTFALL 10 FEC	Effluent UV Disinfected OUTFALL 10 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	595.1	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			7.6
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	OUTFALL 10 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
Sat-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	296	103			5.2	5.2
Average	268	90	---	---	3.6	3.6
Minimum	68	67	---	---	1.2	1.2
Maximum	376	110	---	---	5.5	5.5
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

BOD_5/cBOD$_5$ (mg/L)

DATE	RAW BOD_5	OUTFALL 30 BOD_5	OUTFALL 20 BOD_5	EPBPS BOD_5	OUTFALL 10 FEC cBOD$_5$	OUTFALL 10 FE cBOD$_5$
Sat-01	270	116			2	2
Sun-02	311	121			3	3
Mon-03	293	151			3	3
Tue-04	341				3	3
Wed-05	341				3	3
Thu-06	290	163			< 2	< 2
Fri-07	292	142			2	2
Sat-08	293	133			2	2
Sun-09	275	124			2	2
Mon-10	293				2	2
Tue-11	302				3	3
Wed-12	336				3	3
Thu-13	344				3	3
Fri-14	341				3	3
Sat-15	257				3	3
Sat-16	305				3	3
Mon-17	286				3	3
Tue-18	329	162			3	3
Wed-19	339				3	3
Thu-20	337				3	3
Fri-21	264				3	3
Sat-22	358	181			3	3
Sun-23	169				2	2
Mon-24	228				3	3
Tue-25	277				3	3
Wed-26	323				2	2
Thu-27	310	152			3	3
Fri-28	310	142			3	3
Sat-29	336				3	3
Sun-30	295				3	3
Mon-31	229	144			3	3
Average	308	144	---	---	2.7	2.7
Minimum	169	116	---	---	< 2	< 2
Maximum	358	181	---	---	3	3
GeoMean	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---

TP (mg/L)

DATE	RAW	OUTFALL 30	OUTFALL 20	EPBPS	OUTFALL 10 FEC	OUTFALL 10 FE
Sat-01	6.87	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	6.45	7.31			0.22	0.22
Mon-10	7.37				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
Sat-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	8.35	9.95			0.33	0.33
Sun-23	9.44				0.30	0.30
Mon-24	8.10				0.33	0.33
Tue-25	8.09				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	9.85	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	OUTFALL 10 FE
Sat-01	29.0	33.6			6.62	6.62
Sun-02	32.2	37.9			5.33	5.33
Mon-03	35.4	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
Sat-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	6.31
Sat-29	40.3				6.03	6.03
Sun-30	38.4				5.59	5.59
Mon-31	35.6	39.2			4.14	4.18
Average	38.2	43.0	---	---	5.78	5.78
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
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			
Sat-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		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
Sat-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
Sat-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	146	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	133	151		118
Mon-10	135			129
Tue-11	109			144
Wed-12	96.4			125
Thu-13	97.2			106
Fri-14	117			111
Sat-15	108			127
Sat-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	109			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	172	250		198
Mon-31	173			8.8
Average	132	180	---	142
Minimum	95.3	109	---	108
Maximum	229	283	---	235
GeoMean	---	---	---	---
TOTAL	---	---	---	---

E. coli (Counts/100 mL)

DATE	RAW X10^6	OUTFALL 30 X10^6	OUTFALL 20 X10^6	OUTFALL 10 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
Sat-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	---	---	---	3
Maximum	2.4	3.2	---	27
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.

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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