PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
January 2025

Digested Sludge: Total Monthly Volume (ML)	68.3

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent INFs	Influent RAW	Effluent Non UV Disinfected OUTFALL 10	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
Wed-01	328.7	0.0	259.2	0.0	0.0	11.9	0.0	247.3	247.3
Thu-02	338.0	0.0	270.2	0.0	0.0	12.3	0.0	257.9	257.9
Fri-03	333.2	0.0	274.8	0.0	0.0	12.2	0.0	262.6	262.6
Sat-04	341.3	0.0	271.9	0.0	0.0	12.0	0.0	259.9	259.9
Sun-05	370.5	0.0	274.0	0.0	0.0	11.9	0.0	262.1	262.1
Mon-06	356.1	0.0	280.9	0.0	0.0	12.0	0.0	268.9	268.9
Tue-07	336.1	0.0	273.4	0.0	0.0	12.9	0.0	260.5	260.5
Wed-08	358.9	0.0	278.5	0.0	0.0	12.4	0.0	266.1	266.1
Thu-09	339.8	0.0	274.1	0.0	0.0	13.8	0.0	260.3	260.3
Fri-10	476.2	0.0	289.4	13.6	0.0	12.6	0.0	263.2	263.2
Sat-11	440.5	0.0	322.6	7.0	0.0	13.3	0.0	302.3	302.3
Sun-12	408.1	0.0	286.3	0.0	0.0	13.3	0.0	273.0	273.0
Mon-13	359.9	0.0	282.5	0.0	0.0	13.3	0.0	269.2	269.2
Tue-14	343.2	0.0	275.7	0.0	0.0	13.5	0.0	262.2	262.2
Wed-15	356.7	0.0	283.8	0.0	0.0	13.4	0.0	270.4	270.4
Thu-16	377.5	0.0	286.6	0.0	0.0	13.9	0.0	272.7	272.7
Fri-17	591.8	0.0	270.6	0.0	0.0	13.7	0.0	256.9	256.9
Sat-18	339.6	0.0	270.2	0.0	0.0	14.2	0.0	256.0	256.0
Sun-19	366.8	0.0	274.6	0.0	0.0	14.1	0.0	260.5	260.5
Mon-20	352.5	0.0	278.8	0.0	0.0	13.7	0.0	265.1	265.1
Tue-21	337.6	0.0	271.5	0.0	0.0	13.6	0.0	257.9	257.9
Wed-22	339.1	0.0	265.9	0.0	0.0	13.3	0.0	252.6	252.6
Thu-23	395.8	0.0	271.4	0.0	0.0	13.2	0.0	258.2	258.2
Fri-24	325.6	0.0	270.6	0.0	0.0	12.5	0.0	258.1	258.1
Sat-25	365.6	0.0	267.0	0.0	0.0	12.1	0.0	254.9	254.9
Sun-26	363.7	0.0	269.2	0.0	0.0	12.1	0.0	257.1	257.1
Mon-27	339.2	0.0	275.4	0.0	0.0	12.1	0.0	263.3	263.3
Tue-28	375.0	0.0	275.0	0.0	0.0	12.2	0.0	262.8	262.8
Wed-29	352.5	0.0	280.5	0.0	0.0	12.0	0.0	268.5	268.5
Thu-30	335.9	0.0	273.6	0.0	0.0	11.8	0.0	261.8	261.8
Fri-31	327.5	0.0	272.3	0.0	0.0	11.1	0.0	261.2	261.2
Average	366.9	0.0	276.5	0.7	0.0	12.8	0.0	263.0	263.0
Minimum	325.6	0.0	259.2	0.0	0.0	11.1	0.0	247.3	247.3
Maximum	591.8	0.0	322.6	13.6	0.0	14.2	0.0	302.3	302.3
GeoMean	—	—	—	—	—	—	—	—	—
TOTAL	—	0	8,571	21	0	396	0	8,154	8,154

Liquid Stream Quality

DATE	pH@25°C RAW	pH@25°C OUTFALL 10	pH@25°C OUTFALL 20	pH@25°C OUTFALL 10 FEC	TSS (mg/L) RAW	TSS OUTFALL 10	TSS OUTFALL 20	TSS EPEPS	TSS OUTFALL 10 FEC	TSS OUTFALL 10 FE
Wed-01	7.6			7.5	336				3.4	3.4
Thu-02	7.6			7.4	324				3.4	3.4
Fri-03	7.5			7.4	296				3.1	3.1
Sat-04	7.6			7.5	356				4.3	4.3
Sun-05	7.6			7.5	272				3.6	3.6
Mon-06	7.6			7.5	312				4.4	4.4
Tue-07	7.7			7.5	372				3.3	3.3
Wed-08	7.6			7.5	389				4.1	4.1
Thu-09	7.4			7.4	356				5.1	5.1
Fri-10	7.4	7.6		7.4	384	73			4.0	4.0
Sat-11	7.5	7.7		7.4	312	64			3.3	3.3
Sun-12	7.6			7.4	320				4.4	4.4
Mon-13	7.6			7.3	300				4.3	4.3
Tue-14	7.4			7.5	460				3.8	3.8
Wed-15	7.5			7.4	424				3.5	3.5
Thu-16	7.5			7.3	324				2.8	2.8
Fri-17	7.5			7.5	360				3.6	3.6
Sat-18	7.5			7.4	344				3.7	3.7
Sun-19	7.6			7.5	340				4.2	4.2
Mon-20	7.5			7.4	317				5.2	5.2
Tue-21	7.4			7.5	352				3.9	3.9
Wed-22	7.4			7.5	336				3.9	3.9
Thu-23	7.5			7.5	348				3.8	3.8
Fri-24	7.5			7.5	337				4.5	4.5
Sat-25	7.6			7.5	306				4.0	4.0
Sun-26	7.5			7.6	340				2.8	2.8
Mon-27	7.5			7.5	416				3.8	3.8
Tue-28	7.5			7.5	408				2.1	2.1
Wed-29	7.5			7.5	384				3.8	3.8
Thu-30	7.5			7.4	316				4.3	4.3
Fri-31	7.5			7.5	332				4.3	4.3
Average	7.5	7.7	—	7.4	348	69	—	—	3.8	3.8
Minimum	7.4	7.6	—	7.3	272	64	—	—	2.1	2.1
Maximum	7.7	7.7	—	7.6	460	73	—	—	5.2	5.2
GeoMean	—	—	—	—	—	—	—	—	—	—
TOTAL	—	—	—	—	—	—	—	—	—	—

DATE	BOD_5 RAW	BOD_5 OUTFALL 10	BOD_5 OUTFALL 20	BOD_5 EPEPS	$cBOD_5$ OUTFALL 30 FEC	$cBOD_5$ OUTFALL 30 FE	TP (mg/L) RAW	TP OUTFALL 10	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE
Wed-01	332				3	3	10.60				0.26	0.26
Thu-02	345				3	3	9.43				0.26	0.26
Fri-03	336				2	2	10.90				0.34	0.34
Sat-04	326				3	3	11.80				0.32	0.32
Sun-05	299				2	2	10.90				0.38	0.38
Mon-06	355				3	3	11.80				0.32	0.32
Tue-07	334				3	3	14.00				0.32	0.32
Wed-08	362				3	3	11.40				0.31	0.31
Thu-09	314				4	4	8.56				0.31	0.31
Fri-10	344	179			3	3	9.10	13.10			0.34	0.34
Sat-11	326	135			3	3	7.59	6.05			0.37	0.37
Sun-12	368				3	3	8.93				0.37	0.37
Mon-13	370				2	2	10.70				0.30	0.30
Tue-14	357				3	3	9.67				0.30	0.30
Wed-15	369				2	2	9.39				0.37	0.37
Thu-16	340				2	2	8.22				0.33	0.33
Fri-17	358				3	3	10.40				0.44	0.44
Sat-18	313				3	3	9.79				0.41	0.41
Sun-19	363				3	3	9.70				0.40	0.40
Mon-20	302				3	3	9.32				0.16	0.16
Tue-21	379				2	2	8.85				0.33	0.33
Wed-22	314				2	2	8.87				0.34	0.34
Thu-23	372				3	3	8.68				0.37	0.37
Fri-24	375				3	3	8.75				0.38	0.38
Sat-25	341				3	3	7.45				0.34	0.34
Sun-26	378				3	3	7.93				0.29	0.29
Mon-27	306				3	3	7.86				0.29	0.29
Tue-28	327				2	2	8.30				0.31	0.31
Wed-29	353				3	3	8.65				0.32	0.32
Thu-30	337				3	3	8.26				0.23	0.23
Fri-31	303				2	2	8.94				0.34	0.34
Average	342	157	—	—	2.7	2.7	9.51	9.58	—	—	0.33	0.33
Minimum	299	135	—	—	< 2	< 2	7.45	6.05	—	—	0.16	0.16
Maximum	379	179	—	—	4	4	14.00	13.10	—	—	0.44	0.44
GeoMean	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	—	—	—	—	—	—	—	—	—	—	—	—

DATE	NH_3-N RAW	NH_3-N OUTFALL 10	NH_3-N OUTFALL 20	NH_3-N EPEPS	NH_3-N OUTFALL 10 FEC	NH_3-N OUTFALL 10 FE	un-ionized NH_3-N OUT-FAL 30	un-ionized NH_3-N OUT-FAL 20	un-ionized NH_3-N OUT-FAL 10	TKN RAW	TKN OUTFALL 10	TKN OUTFALL 20	TKN OUTFALL 10 FEC
Wed-01	44.3				1.78	1.78				65.6			3.4
Thu-02	43.3				2.38	2.38				64.6			4.0
Fri-03	34.4				2.22	2.22				68.1			4.0
Sat-04	34.1				2.03	2.03				74.9			4.2
Sun-05	33.5				2.33	2.33				64.4			4.6
Mon-06	39.4				2.52	2.52				76.1			4.5
Tue-07	45.5				3.38	3.38				78.7			5.2
Wed-08	44.7				3.66	3.66				79.2			6.0
Thu-09	44.5				2.77	2.77				55.3			4.2
Fri-10	42.0	45.1			2.48	2.48				54.1	83.8		3.8
Sat-11	36.7	38.8			2.73	2.73				52.1	41.8		4.0
Sun-12	41.3				4.11	4.11				59.3			5.3
Mon-13	43.9				3.50	3.50				76.8			5.5
Tue-14	44.3				2.57	2.57				68.0			4.3
Wed-15	44.8				2.54	2.54				64.9			4.1
Thu-16	43.4				2.46	2.46				62.2			4.3
Fri-17	46.4				3.35	3.35				75.9			6.2
Sat-18	47.3				3.71	3.71				79.0			6.8
Sun-19	45.2				4.56	4.56				77.1			6.4
Mon-20	44.4				3.84	3.84				73.3			5.4
Tue-21	44.1				3.17	3.17				65.0			4.9
Wed-22	45.9				3.46	3.46				61.7			5.0
Thu-23	44.3				3.74	3.74				60.9			5.4
Fri-24	46.4				3.68	3.68				63.6			5.8
Sat-25	43.4				1.65	1.65				54.8			3.0
Sun-26	42.3				0.95	0.95				54.6			2.1
Mon-27	41.7				0.92	0.92				57.1			1.9
Tue-28	41.6				1.25	1.25				57.6			2.4
Wed-29	41.7				4.19	4.19				57.6			4.9
Thu-30	44.0				5.62	5.62				56.8			4.3
Fri-31	41.8				6.10	6.10				57.9			7.1
Average	42.6	42.0	—	—	3.02	3.02	—	—	—	65.1	62.7	—	4.6
Minimum	33.5	38.8	—	—	0.92	0.92	—	—	—	52.1	41.8	—	1.9
Maximum	47.3	45.1	—	—	6.10	6.10	—	—	—	79.2	83.8	—	7.1
GeoMean	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	—	—	—	—	—	—	—	—	—	—	—	—	—

DATE	NO_2+NO_3 RAW	NO_2+NO_3 OUTFALL 10	NO_2+NO_3 OUTFALL 20	NO_2+NO_3 OUTFALL 10 FEC	Chloride RAW	Chloride OUTFALL 10	Chloride OUTFALL 20	Chloride OUTFALL 10 FEC	*E. coli* (Counts/100 mL) RAW	*E. coli* OUTFALL 10	*E. coli* OUTFALL 20	*E. coli* OUTFALL 10 FEC
Wed-01	< 0.01			10.6	95.6			102.0				7
Thu-02				12.4	101.0			95.7				8
Fri-03				10.1	94.3			100.0				13
Sat-04				11.3	89.3			94.7				9
Sun-05				13.2	88.0			90.7				10
Mon-06				10.4	97.8			89.3				7
Tue-07				11.6	104.0			103.0				10
Wed-08	< 0.01			11.7	128.0			111.0				7
Thu-09				13.0	146.0			129.0				10
Fri-10		0.10		13.2	230.0	385		114.0			1.8	10
Sat-11		0.07		12.1	226.0	467		229.0			0.7	8
Sun-12				11.8	217.0			194.0				10
Mon-13				11.9	155.0			195.0				13
Tue-14				13.6	167.0			160.0	2.1			10
Wed-15	< 0.01			12.9	216.0			165.0				10
Thu-16				12.2	184.0			220.0	2.0			6
Fri-17				12.7	125.0			210.0				8
Sat-18				12.5	96.7			143.0				11
Sun-19				12.6	84.1			106.0				10
Mon-20				11.6	85.1			95.9				12
Tue-21				12.6	101.0			104.0				19
Wed-22	< 0.01			12.3	130.0			115.0				13
Thu-23				12.9	130.0			133.0				10
Fri-24				13.6	118.0			148.0				9
Sat-25				10.5	105.0			125.0				6
Sun-26				8.8	104.0			112.0				5
Mon-27				8.3	111.0			109.0				3
Tue-28				9.1	153.0			138.0				4
Wed-29	< 0.01			12.5	297.0			219.0				10
Thu-30				12.6	132.0			290.0				17
Fri-31				12.7	119.0			172.0				18
Average	< 0.01	0.09	—	11.9	136	426	—	142			—	
Minimum	< 0.01	0.07	—	8.3	84.1	385	—	89.3	2.0	0.7	—	3
Maximum	< 0.01	0.10	—	13.6	297	467	—	290	2.1	1.8	—	19
GeoMean	—	—	—	—	—	—	—	—	2.0	1.1	—	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
5	5	100%	5	5	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 discherged 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
	Insufficient Sample
	Alberta Environment & Parks

Trina Manning MSc., P.Eng.
Senior Manager, WWTP Operations

Paul Jacquier MBA, BMSc.
Senior Manager, Analytical Operations