PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
August 2024

Digested Sludge: Total Monthly Volume (ML)	71.1

Volume of Flow (ML)

DATE	Peak Flow (ML/D)	Influent: INFs	Influent: RAW	Effluent – Non UV Disinfected: OUTFALL 30	OUTFALL 20	MPW	Effluent – UV Disinfected: EPEPS	OUTFALL 10: FEC	FE
Thu-01	330.7	0.0	278.7	0.0	0.0	13.2	0.0	265.5	265.5
Fri-02	324.9	0.0	277.2	0.0	0.0	13.1	0.0	264.1	264.1
Sat-03	317.1	0.0	273.4	0.0	0.0	12.9	0.0	260.5	260.5
Sun-04	1,492.7	0.6	295.9	22.6	0.0	12.3	0.0	261.0	261.0
Mon-05	1,674.9	150.0	621.0	260.2	0.0	12.7	0.0	348.1	348.1
Tue-06	379.2	0.0	313.5	0.0	0.0	12.8	0.0	300.7	300.7
Wed-07	384.4	0.0	295.4	0.0	0.0	13.2	0.0	282.2	282.2
Thu-08	336.7	0.0	291.1	0.0	0.0	12.2	0.0	278.9	278.9
Fri-09	338.6	0.0	289.2	0.0	0.0	12.4	0.0	276.8	276.8
Sat-10	339.1	0.0	279.4	0.0	0.0	12.4	0.0	267.0	267.0
Sun-11	390.8	0.0	278.9	0.0	0.0	12.5	0.0	266.4	266.4
Mon-12	344.0	0.0	289.0	0.0	0.0	12.3	0.0	276.7	276.7
Tue-13	927.8	0.0	355.8	47.0	0.0	12.5	0.0	296.3	296.3
Wed-14	354.9	0.0	295.6	0.0	0.0	12.9	0.0	282.7	282.7
Thu-15	834.9	0.0	308.3	25.7	0.0	12.2	0.0	270.4	270.4
Fri-16	1,024.8	0.0	440.7	99.5	0.0	12.2	0.0	329.0	329.0
Sat-17	407.7	0.0	316.1	0.0	0.0	12.2	0.0	303.9	303.9
Sun-18	353.1	0.0	288.5	0.0	0.0	12.3	0.0	276.2	276.2
Mon-19	488.9	0.0	302.1	9.1	0.0	12.3	0.0	280.7	280.7
Tue-20	375.3	0.0	294.7	1.1	0.0	10.6	0.0	283.0	283.0
Wed-21	340.8	0.0	287.6	0.0	0.0	11.0	0.0	276.6	276.6
Thu-22	330.0	0.0	281.6	0.0	0.0	10.2	0.0	271.4	271.4
Fri-23	348.8	0.0	290.9	0.0	0.0	10.7	0.0	280.2	280.2
Sat-24	658.2	0.0	324.4	16.2	0.0	11.4	0.0	296.8	296.8
Sun-25	923.2	0.0	423.3	83.1	0.0	10.9	0.0	329.3	329.3
Mon-26	355.7	0.0	304.3	0.0	0.0	11.2	0.0	293.1	293.1
Tue-27	551.7	0.0	299.8	7.0	0.0	11.7	0.0	281.1	281.1
Wed-28	534.1	0.0	342.2	30.1	0.0	11.7	0.0	300.4	300.4
Thu-29	371.2	0.0	299.0	0.0	0.0	12.0	0.0	287.0	287.0
Fri-30	338.1	0.0	290.1	0.0	0.0	11.8	0.0	278.3	278.3
Sat-31	349.6	0.0	278.0	0.0	0.0	11.8	0.0	266.2	266.2
Average	533.0	4.9	316.3	19.4	0.0	12.1	0.0	284.9	284.9
Minimum	317.1	0.0	273.4	0.0	0.0	10.2	0.0	260.5	260.5
Maximum	1,674.9	150.0	621.0	260.2	0.0	13.2	0.0	348.1	348.1
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	151	9,806	602	0	374	0	8,831	8,831

Liquid Stream Quality

DATE	pH@25°C: RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	TSS (mg/L): RAW	OUTFALL 30	OUTFALL 20	EPEPS	OUTFALL 10 FEC	FE
Thu-01	7.8			7.6	468				4.8	4.8
Fri-02	7.7			7.5	452				3.1	3.1
Sat-03	7.8			7.6	384				4.4	4.4
Sun-04	7.7	7.9		7.5	464	113			3.5	3.5
Mon-05	7.5	7.3		7.3	380	85			5.2	5.2
Tue-06	7.7			7.4	460				4.0	4.0
Wed-07	7.7			7.5	408				4.0	4.0
Thu-08	7.7			7.6	376				4.1	4.1
Fri-09	7.7			7.5	452				3.7	3.7
Sat-10	7.7			7.5	432				4.5	4.5
Sun-11	7.7			7.5	456				4.6	4.6
Mon-12	7.8			7.6	480				7.1	7.1
Tue-13	7.5	7.5		7.6	568	55			7.7	7.7
Wed-14	7.6			7.5	440				6.3	6.3
Thu-15	7.6	7.7		7.5	432	106			4.8	4.8
Fri-16	7.4	7.3		7.5	326	68			6.3	6.3
Sat-17	7.6			7.5	408				4.4	4.4
Sun-18	7.6			7.5	366				4.7	4.7
Mon-19	7.5	7.7		7.7	420	64			4.6	4.6
Tue-20	7.7	7.9		7.6	412	83			4.7	4.7
Wed-21	7.6			7.7	468				4.4	4.4
Thu-22	7.6			7.9	420				4.1	4.1
Fri-23	7.8			7.6	400				3.1	3.1
Sat-24	7.7	7.8		7.6	380	95			4.6	4.6
Sun-25	7.4	7.3		7.4	349	69			4.5	4.5
Mon-26	7.6			7.5	408				5.0	5.0
Tue-27	7.5	7.8		7.5	460	96			5.1	5.1
Wed-28	7.5	7.7		7.5	468	71			4.3	4.3
Thu-29	7.5			7.4	428				5.0	5.0
Fri-30	7.7			7.5	420				4.9	4.9
Sat-31	7.6			7.5	448				4.3	4.3
Average	7.6	7.6	---	7.5	427	82	---	---	4.7	4.7
Minimum	7.4	7.3	---	7.3	326	55	---	---	3.1	3.1
Maximum	7.8	7.9	---	7.9	568	113	---	---	7.7	7.7
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	BOD_5/$cBOD_5$ (mg/L): 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 (mg/L): RAW	OUTFALL 30	OUTFALL 20	EPEPS	OUTFALL 10 FEC	FE
Thu-01	276				2	2	8.91				0.36	0.36
Fri-02	358				2	2	8.65				0.35	0.35
Sat-03	315				< 2	< 2	8.56				0.37	0.37
Sun-04	309	276			3	3	7.95	8.79			0.32	0.32
Mon-05	181	44			2	2	4.53	1.92			0.34	0.34
Tue-06	321				3	3	6.53				0.41	0.41
Wed-07	308				3	3	7.71				0.35	0.35
Thu-08	302				2	2	7.70				0.32	0.32
Fri-09	307				3	3	7.48				0.33	0.33
Sat-10	314				3	3	9.40				0.38	0.38
Sun-11	310				3	3	9.04				0.49	0.49
Mon-12	341				4	4	7.87				0.45	0.45
Tue-13	307	87			3	3	7.85	4.11			0.48	0.48
Wed-14	253				3	3	10.7				0.38	0.38
Thu-15	299	178			3	3	7.91	0.57			0.54	0.54
Fri-16	216	63			3	3	5.30	2.96			0.37	0.37
Sat-17	302				3	3	7.15				0.33	0.33
Sun-18	220				3	3	7.89				0.30	0.30
Mon-19	328	184			2	2	7.49	7.69			0.31	0.31
Tue-20	326	102			3	3	7.69	6.62			0.30	0.30
Wed-21	331				3	3	8.78				0.33	0.33
Thu-22	337				2	2	8.83				0.32	0.32
Fri-23	318				2	2	8.11				0.30	0.30
Sat-24	365	205			2	2	7.19	6.29			0.31	0.31
Sun-25	225	52			3	3	5.26	3.71			0.34	0.34
Mon-26	286				3	3	7.46				0.33	0.33
Tue-27	329	188			3	3	8.59	7.08			0.33	0.33
Wed-28	287	99			< 2	< 2	7.42	4.96			0.34	0.34
Thu-29	292				3	3	7.59				0.33	0.33
Fri-30	325				2	2	7.42				0.19	0.19
Sat-31	353				3	3	7.19				0.43	0.43
Average	301	134	---	---	2.7	2.7	7.75	4.97	---	---	0.36	0.36
Minimum	181	44	---	---	< 2	< 2	4.53	0.57	---	---	0.19	0.19
Maximum	365	276	---	---	4	4	10.7	8.79	---	---	0.54	0.54
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH3-N (mg/L): RAW	OUTFALL 30	OUTFALL 20	EPEPS	OUTFALL 10 FEC	FE	un-ionized NH3-N (mg/L): OUTFALL 30	OUTFALL 20	OUTFALL 10	TKN (mg/L): RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC
Thu-01	33.3				1.64	1.64				59.7			3.6
Fri-02	29.3				1.52	1.52				59.8			3.4
Sat-03	29.5				1.21	1.21				56.1			3.2
Sun-04	30.9	44.6			0.98	0.98				53.6	62.3		2.6
Mon-05	13.3	11.4			0.96	0.96				25.7	15.0		2.3
Tue-06	28.9				1.83	1.83				44.3			3.1
Wed-07	28.5				1.21	1.21				49.0			2.8
Thu-08	29.7				1.12	1.12				45.6			2.7
Fri-09	28.4				1.15	1.15				48.2			2.7
Sat-10	29.5				0.98	0.98				55.9			2.5
Sun-11	29.8				1.08	1.08				54.4			2.9
Mon-12	28.9				1.01	1.01				47.8			2.6
Tue-13	23.6	26.8			0.64	0.64				48.3	37.3		2.4
Wed-14	36.1				0.77	0.77				70.5			2.5
Thu-15	33.8	35.2			0.83	0.83				55.9	3.9		2.9
Fri-16	23.2	16.9			0.70	0.70				37.1	20.1		2.2
Sat-17	32.5				1.12	1.12				50.5			2.5
Sun-18	35.5				1.14	1.14				53.6			2.6
Mon-19	32.8	38.0			1.18	1.18				52.8	50.4		2.7
Tue-20	33.7	35.9			1.22	1.22				60.3	49.4		3.5
Wed-21	34.6				1.25	1.25				63.2			3.2
Thu-22	36.6				1.75	1.75				65.8			3.9
Fri-23	35.2				1.01	1.01				63.1			2.9
Sat-24	32.0	36.2			0.71	0.71				55.6	52.8		2.8
Sun-25	23.0	21.8			1.37	1.37				41.9	27.7		3.0
Mon-26	34.7				1.99	1.99				57.3			3.5
Tue-27	37.5	42.4			1.68	1.68				58.2	57.7		3.4
Wed-28	30.9	41.9			0.85	0.85				54.2	53.1		2.3
Thu-29	37.3				0.59	0.59				61.2			2.3
Fri-30	37.9				0.79	0.79				58.6			2.2
Sat-31	40.0				0.92	0.92				60.9			2.7
Average	31.3	31.9	---	---	1.14	1.14	---	---	---	53.8	39.1	---	2.8
Minimum	13.3	11.4	---	---	0.59	0.59	---	---	---	25.7	3.9	---	2.2
Maximum	40.0	44.6	---	---	1.99	1.99	---	---	---	70.5	62.3	---	3.9
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NO_2+NO_3 (mg/L): RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	Chloride (mg/L): RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	*E. coli* (Counts/100 mL): RAW X10^6	OUTFALL 30 X10^6	OUTFALL 20 X10^6	OUTFALL 10 FEC
Thu-01				11.9	92			98				7
Fri-02				12.6	86			99				12
Sat-03				11.5	87			99				11
Sun-04		0.09		13.3	84	83.8		95		3.0		6
Mon-05		0.52		8.7	45	32.7		72		1.0	0.7	18
Tue-06				11.6	87			79				37
Wed-07	< 0.01			8.3	88			87				13
Thu-08				10.1	92			93				11
Fri-09				11.3	92			95				16
Sat-10				11.6	86			95				14
Sun-11				12.0	80			90				6
Mon-12				11.7	84			87				11
Tue-13		0.09		9.9	72	64.0		88		1.5		6
Wed-14	< 0.01			11.6	93			86				4
Thu-15		0.04		12.0	83	69.2		96		3.4		9
Fri-16		0.04		8.4	59	42.4		78		1.1		6
Sat-17				10.5	74			81				28
Sun-18				11.3	79			82				13
Mon-19		0.04		10.4	81	84.9		87		1.9		10
Tue-20		0.03		12.0	81	81.3		88	4.3	4.1		11
Wed-21	< 0.01			12.2	92			89				16
Thu-22				13.8	91			92				8
Fri-23				13.8	89			93				9
Sat-24		0.05		11.2	80	79.0		88		3.9		4
Sun-25		0.03		9.5	64	50.2		71		3.0		14
Mon-26				12.1	91			79				12
Tue-27		0.10		12.2	89	97.1		97	8.0	9.0		19
Wed-28	< 0.01	0.02		11.6	83	88.6		94		5.4		20
Thu-29				11.8	91			91				11
Fri-30				12.8	87			100				14
Sat-31				13.1	82			99				9
Average	< 0.01	0.09	---	11.4	83	70.3	---	89				
Minimum	< 0.01	0.02	---	8.3	45	32.7	---	71	4.3	1.0	0.7	4
Maximum	< 0.01	0.52	---	13.8	93	97.1	---	100	8.0	9.0	0.7	37
GeoMean	---	---	---	---	---	---	---	---	5.9	2.8	0.7	11
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
52	52	100%	379	379	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 (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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