PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report

Digested Sludge: Total Monthly Volume (ML)	68.5

Volume of Flow (ML) / Liquid Stream Quality: pH@25°C

DATE	Peak Flow (MLD)	Influent INFs	Influent RAW	Effluent Non UV Disinfected OUTFALL 30	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	pH@25°C RAW	pH@25°C OUTFALL 30	pH@25°C OUTFALL 20	pH@25°C OUTFALL 10 FEC
Fri-01	315.9	0.0	252.9	0.0	0.0	9.5	0.0	243.4	243.4	7.4			7.7
Sat-02	321.5	0.0	245.2	0.0	0.0	9.7	0.0	235.5	235.5	7.6			7.6
Sun-03	666.3	0.0	283.0	30.1	0.0	9.4	0.0	243.5	243.5	7.4	7.5		7.6
Mon-04	1,497.1	16.7	732.9	413.7	0.0	10.6	0.0	308.6	308.6	7.4	7.4		7.5
Tue-05	430.1	0.0	316.3	5.4	0.0	9.4	0.0	301.5	301.5	7.6	7.6		7.5
Wed-06	370.0	0.0	285.6	0.0	0.0	10.0	0.0	275.6	275.6	7.7			7.6
Thu-07	384.5	0.0	275.7	0.0	0.0	9.2	0.0	266.5	266.5	7.6			7.6
Fri-08	606.6	0.0	333.5	36.0	0.0	9.2	0.0	288.3	288.3	7.5	7.5		7.6
Sat-09	353.6	0.0	274.5	0.0	0.0	10.7	0.0	263.8	263.8	7.7			7.6
Sun-10	356.4	0.0	268.0	0.0	0.0	10.3	0.0	257.7	257.7	7.6			7.6
Mon-11	344.4	0.0	274.7	0.0	0.0	8.8	0.0	265.9	265.9	7.6			7.6
Tue-12	339.6	0.0	274.3	0.0	0.0	10.1	0.0	264.2	264.2	7.6			7.6
Wed-13	337.0	0.0	270.9	0.0	0.0	10.3	0.0	260.6	260.6	7.5			7.5
Thu-14	334.9	0.0	269.3	0.0	0.0	9.2	0.0	260.1	260.1	7.5			7.6
Fri-15	325.3	0.0	264.8	0.0	0.0	10.3	0.0	254.5	254.5	7.5			7.7
Sat-16	324.1	0.0	254.4	0.0	0.0	9.8	0.0	244.6	244.6	7.6			7.7
Sun-17	322.7	0.0	252.7	0.0	0.0	10.0	0.0	242.7	242.7	7.7			7.7
Mon-18	346.0	0.0	269.4	0.0	0.0	9.6	0.0	259.8	259.8	7.6			7.6
Tue-19	320.3	0.0	263.3	0.0	0.0	9.5	0.0	253.8	253.8	7.5			7.6
Wed-20	316.5	0.0	260.6	0.0	0.0	10.1	0.0	250.5	250.5	7.6			7.7
Thu-21	1,506.8	34.6	841.4	519.8	0.0	9.9	0.0	311.7	311.7	7.4	7.4		7.4
Fri-22	1,503.5	23.0	825.6	517.6	0.0	9.7	0.0	298.3	298.3	7.5	7.6		7.5
Sat-23	576.1	0.0	393.1	74.2	0.0	10.0	0.0	308.9	308.9	7.6	7.6		7.5
Sun-24	447.4	0.0	338.5	4.1	0.0	9.7	0.0	324.7	324.7	7.7	7.7		7.7
Mon-25	409.8	0.0	328.2	0.0	0.0	9.7	0.0	318.5	318.5	7.7			7.6
Tue-26	500.9	0.0	327.3	33.5	0.0	10.3	0.0	283.5	283.5	7.6	7.7		7.7
Wed-27	445.8	0.0	306.2	6.2	0.0	9.7	0.0	290.3	290.3	7.5	7.7		7.6
Thu-28	379.4	0.0	296.9	0.0	0.0	10.9	0.0	286.0	286.0	7.6			7.6
Fri-29	363.0	0.0	293.5	0.0	0.0	10.0	0.0	283.5	283.5	7.6			7.7
Sat-30	372.7	0.0	286.7	0.0	0.0	9.6	0.0	277.1	277.1	7.6			7.8
Sun 31	1,635.5	30.4	507.2	221.7	0.0	9.7	0.0	275.8	275.8	7.6	7.5		7.6
Average	540.4	3.4	344.1	60.1	0.0	9.8	0.0	274.2	274.2	7.6	7.6	---	7.6
Minimum	315.9	0.0	245.2	0.0	0.0	8.8	0.0	235.5	235.5	7.4	7.4	---	7.4
Maximum	1,635.5	34.6	841.4	519.8	0.0	10.9	0.0	324.7	324.7	7.7	7.7	---	7.8
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	105	10,667	1,862	0	305	0	8,499	8,499	---	---	---	---

Liquid Stream Quality: TSS (mg/L) and BOD_5/$cBOD_5$ (mg/L)

DATE	TSS RAW	TSS OUTFALL 30	TSS OUTFALL 20	TSS EPEPS	TSS OUTFALL 10 FEC	TSS OUTFALL 10 FE	RAW BOD_5	OUTFALL 30 BOD_5	OUTFALL 20 BOD_5	EPEPS BOD_5	OUTFALL 10 FEC $cBOD_5$	OUTFALL 10 FE $cBOD_5$
Fri-01	304				3.3	3.3	354				3.0	3.0
Sat-02	312				2.9	2.9	350				3.0	3.0
Sun-03	432	172			3.5	3.5	315	224			3.0	3.0
Mon-04	356	146			4.9	4.9	205	85			4.0	4.0
Tue-05	304	59			2.8	2.8	223	120			3.0	3.0
Wed-06	236				2.9	2.9	328				3.0	3.0
Thu-07	243				3.0	3.0	257				2.0	2.0
Fri-08	324	66			3.3	3.3	248	152			3.0	3.0
Sat-09	236				3.2	3.2	183				3.0	3.0
Sun-10	256				3.4	3.4	289				3.0	3.0
Mon-11	306				3.8	3.8	265				3.0	3.0
Tue-12	266				4.6	4.6	251				3.0	3.0
Wed-13	316				4.9	4.9	259				3.0	3.0
Thu-14	300				3.2	3.2	260				3.0	3.0
Fri-15	288				5.1	5.1	305				3.0	3.0
Sat-16	254				4.4	4.4	268				2.0	2.0
Sun-17	296				6.4	6.4	278				3.0	3.0
Mon-18	300				9.8	9.8	305				3.0	3.0
Tue-19	288				5.7	5.7	313				3.0	3.0
Wed-20	328				4.1	4.1	180				3.0	3.0
Thu-21	222	111			4.2	4.2	182	87			3.0	3.0
Fri-22	184	43			3.4	3.4	97	52			< 2.0	< 2.0
Sat-23	178	50			3.2	3.2	150	52			< 2.0	< 2.0
Sun-24	192	44			3.7	3.7	194	76			< 2.0	< 2.0
Mon-25	252				3.9	3.9	234				3.0	3.0
Tue-26	280	69			4.8	4.8	247	128			3.0	3.0
Wed-27	292	82			3.5	3.5	224	113			3.0	3.0
Thu-28	250				5.2	5.2	193				3.0	3.0
Fri-29	336				4.9	4.9	258				3.0	3.0
Sat-30	204				5.6	5.6	244				3.0	3.0
Sun 31	878	147			5.6	5.6	148	78			3.0	3.0
Average	297	90	---	---	4.3	4.3	245	106	---	---	2.9	2.9
Minimum	178	43	---	---	2.8	2.8	97	52	---	---	< 2.0	< 2.0
Maximum	878	172	---	---	9.8	9.8	354	224	---	---	4.0	4.0
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

Liquid Stream Quality: TP (mg/L) and NH3-N (mg/L)

DATE	TP RAW	TP OUTFALL 30	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE	NH3-N RAW	NH3-N OUTFALL 30	NH3-N OUTFALL 20	NH3-N EPEPS	NH3-N OUTFALL 10 FEC	NH3-N OUTFALL 10 FE
Fri-01	7.24				0.21	0.21	39.0				2.37	2.37
Sat-02	7.79				0.20	0.20	34.7				2.75	2.75
Sun-03	7.56	7.69			0.21	0.21	33.2	39.8			2.99	2.99
Mon-04	4.32	2.34			0.29	0.29	18.2	17.8			1.34	1.34
Tue-05	5.33	3.19			0.16	0.16	26.7	26.9			1.85	1.85
Wed-06	6.98				0.17	0.17	43.0				3.58	3.58
Thu-07	6.76				0.19	0.19	44.0				3.56	3.56
Fri-08	5.84	4.32			0.21	0.21	28.4	34.3			3.46	3.46
Sat-09	6.15				0.19	0.19	37.0				2.31	2.31
Sun-10	6.34				0.26	0.26	35.4				1.92	1.92
Mon-11	6.62				0.22	0.22	36.3				3.43	3.43
Tue-12	6.46				0.25	0.25	35.5				3.15	3.15
Wed-13	6.17				0.26	0.26	35.4				2.69	2.69
Thu-14	6.96				0.41	0.41	39.3				1.10	1.10
Fri-15	6.87				0.33	0.33	39.7				3.99	3.99
Sat-16	7.26				0.29	0.29	35.4				2.78	2.78
Sun-17	7.91				0.34	0.34	39.4				2.32	2.32
Mon-18	7.52				0.37	0.37	39.3				1.38	1.38
Tue-19	7.46				0.29	0.29	44.6				3.52	3.52
Wed-20	7.42				0.25	0.25	37.9				4.83	4.83
Thu-21	3.46	2.45			0.26	0.26	14.1	13.6			2.97	2.97
Fri-22	2.87	1.64			0.18	0.18	12.4	16.1			0.09	0.09
Sat-23	4.81	2.84			0.16	0.16	23.6	26.6			1.29	1.29
Sun-24	4.98	2.70			0.19	0.19	26.0	30.7			6.72	6.72
Mon-25	6.44				0.22	0.22	28.0				8.58	8.58
Tue-26	5.86	3.88			0.26	0.26	31.6	35.9			6.37	6.37
Wed-27	6.77	5.81			0.20	0.20	33.7	41.9			3.13	3.13
Thu-28	7.04				0.26	0.26	35.2				3.62	3.62
Fri-29	6.92				0.27	0.27	33.3				3.60	3.60
Sat-30	6.49				0.43	0.43	33.4				4.63	4.63
Sun 31	8.13	3.06			0.28	0.28	21.9	17.3			2.37	2.37
Average	6.41	3.63	---	---	0.25	0.25	32.8	27.4	---	---	3.18	3.18
Minimum	2.87	1.64	---	---	0.16	0.16	12.4	13.6	---	---	0.09	0.09
Maximum	8.13	7.69	---	---	0.43	0.43	44.6	41.9	---	---	8.58	8.58
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

Liquid Stream Quality: TKN (mg/L), NO_2+NO_3 (mg/L), Chloride (mg/L), *E. coli* (Counts/100 mL)

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	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
Fri-01	58.0			4.60				9.49	88			95				13
Sat-02	62.5			4.80				11.5	87			96				10
Sun-03	58.7	61.1		4.80		0.63		10.7	115	146		92		2.4		10
Mon-04	34.8	24.1		3.10		1.60		6.48	83	80		89		0.9		14
Tue-05	46.1	37.9		3.10		1.04		6.34	94	83		85		1.1		130
Wed-06	59.3			5.00	< 0.01			7.20	106			97				14
Thu-07	57.3			5.40				8.12	101			104				15
Fri-08	43.4	41.1		4.80		0.89		7.15	95	102		100		1.5		10
Sat-09	48.2			4.20				7.53	88			98				8
Sun-10	49.2			4.90				8.29	89			94				11
Mon-11	50.6			5.10				8.17	91			91				16
Tue-12	54.5			4.90				8.16	95			98				6
Wed-13	53.4			4.20	< 0.01			8.04	90			98				14
Thu-14	55.3			4.00				8.02	96			98				13
Fri-15	53.3			6.30				8.99	90			98				9
Sat-16	59.8			5.00				9.5	90			94				14
Sun-17	60.3			4.20				10.2	89			93				9
Mon-18	59.4			4.30				11.4	89			93				10
Tue-19	62.0			5.80				9.75	88			91				9
Wed-20	62.0			7.30	< 0.01			7.64	94			92	1.7			13
Thu-21	25.2	23.8		4.90		0.84		5.28	50	54		84		0.9		18
Fri-22	21.9	22.0		1.20		3.85		2.89	59	64		52		0.3		4
Sat-23	39.4	37.0		3.40		1.97		6.47	92	92		76		0.7		4
Sun-24	42.2	38.3		7.70		0.79		7.22	98	93		95		1.0		7
Mon-25	49.0			8.60				6.45	100			102				25
Tue-26	40.4	42.4		6.70		0.10		6.53	102	112		105		0.9		18
Wed-27	46.2	45.7		3.90	< 0.01	0.11		7.49	99	102		103		1.8		10
Thu-28	57.1			6.00				7.53	94			102	1.4			21
Fri-29	53.5			5.40				8.35	96			100				6
Sat-30	53.3			6.90				7.92	97			101				24
Sun 31	46.4	23.7		4.50		0.67		9.48	69	55		97		1.9		13
Average	50.4	36.1	---	5.00	< 0.01	1.14	---	8.01	91	89	---	94	---	---	---	---
Minimum	21.9	22.0	---	1.20	< 0.01	0.10	---	2.89	50	54	---	52	1.4	0.3	---	4
Maximum	62.5	61.1	---	8.60	< 0.01	3.85	---	11.5	115	146	---	105	1.7	2.4	---	130
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	1.5	1.1	---	12
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
121	121	100%	286	286	100%

Report Comments

1	RAW - May 9: Analysis of the sample exceeded the recommended hold time for BOD.

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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