PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
March 2022

Digested Sludge: Total Monthly Volume (ML)	67.8

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent INF-S	Effluent RAW	Non UV Disinfected OUTFALL 30	Non UV Disinfected OUTFALL 20	Non UV Disinfected MPW	UV Disinfected EPEPS	UV Disinfected OUTFALL 10 FEC	UV Disinfected OUTFALL 10 FE
Tue-01	701.2	0.0	240.6	0.0	0.0	12.5	0.0	228.1	228.1
Wed-02	331.3	0.0	249.7	0.0	0.0	11.1	0.0	238.6	238.6
Thu-03	319.7	0.0	245.6	0.0	0.0	11.4	0.0	234.2	234.2
Fri-04	316.7	0.0	250.4	0.0	0.0	11.6	0.0	238.8	238.8
Sat-05	337.4	0.0	250.1	0.0	0.0	10.8	0.0	239.3	239.3
Sun-06	364.2	0.0	257.0	0.0	0.0	10.8	0.0	246.2	246.2
Mon-07	359.9	0.0	262.7	0.0	0.0	11.1	0.0	251.6	251.6
Tue-08	333.2	0.0	249.6	0.0	0.0	11.4	0.0	238.2	238.2
Wed-09	326.1	0.0	251.0	0.0	0.0	11.4	0.0	239.6	239.6
Thu-10	328.2	0.0	250.9	0.0	0.0	12.3	0.0	238.6	238.6
Fri-11	348.3	0.0	254.1	0.0	0.0	13.3	0.0	240.8	240.8
Sat-12	613.5	0.0	309.0	65.8	0.0	13.2	0.0	230.0	230.0
Sun-13	364.0	0.0	253.5	0.0	0.0	11.1	0.0	242.4	242.4
Mon-14	440.6	0.0	261.6	0.0	0.0	11.2	0.0	250.4	250.4
Tue-15	661.9	0.0	331.1	74.2	0.0	11.2	0.0	245.7	245.7
Wed-16	838.2	0.0	408.7	137.1	0.0	10.8	0.0	260.8	260.8
Thu-17	767.3	0.0	413.3	128.8	0.0	10.9	0.0	273.6	273.6
Fri-18	786.2	0.0	424.5	134.0	0.0	10.8	0.0	279.7	279.7
Sat-19	640.7	0.0	377.3	90.0	0.0	12.1	0.0	275.2	275.2
Sun-20	485.7	0.0	323.1	45.6	0.0	11.5	0.0	266.0	266.0
Mon-21	651.5	0.0	350.5	76.4	0.0	11.9	0.0	262.2	262.2
Tue-22	789.0	0.0	421.2	141.2	0.0	12.2	0.0	267.8	267.8
Wed-23	774.3	0.0	453.2	152.7	0.0	12.4	0.0	288.1	288.1
Thu-24	530.2	0.0	382.0	76.3	0.0	12.1	0.0	293.6	293.6
Fri-25	429.2	0.0	303.9	17.5	0.0	11.5	0.0	274.9	274.9
Sat-26	442.7	0.0	288.1	19.1	0.0	11.5	0.0	257.5	257.5
Sun-27	540.2	0.0	301.2	41.4	0.0	11.9	0.0	247.9	247.9
Mon-28	479.1	0.0	306.6	33.2	0.0	11.9	0.0	261.5	261.5
Tue-29	522.8	0.0	314.7	42.2	0.0	11.6	0.0	260.9	260.9
Wed-30	520.2	0.0	328.0	41.9	0.0	11.4	0.0	274.7	274.7
Thu-31	445.8	0.0	321.5	16.4	0.0	11.7	0.0	293.4	293.4
Average	509.3	0.0	310.8	43.0	0.0	11.6	0.0	256.1	256.1
Minimum	316.7	0.0	240.6	0.0	0.0	10.8	0.0	228.1	228.1
Maximum	838.2	0.0	453.2	152.7	0.0	13.3	0.0	293.6	293.6
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	9,635	1,334	0	361	0	7,940	7,940

Liquid Stream Quality

DATE	pH@25°C RAW	pH@25°C OUTFALL 30	pH@25°C OUTFALL 20	pH@25°C OUTFALL 10 FEC	TSS (mg/L) RAW	TSS (mg/L) OUTFALL 30	TSS (mg/L) OUTFALL 20	TSS (mg/L) EPEPS	TSS (mg/L) OUTFALL 10 FEC	TSS (mg/L) OUTFALL 10 FE
Tue-01	7.4			7.6	316				4.0	4.0
Wed-02	7.4			7.4	233				4.0	4.0
Thu-03	7.4			7.5	312				4.5	4.5
Fri-04	7.2			7.5	296				3.9	3.9
Sat-05	7.2			7.4	376				5.2	5.2
Sun-06	7.3			7.4	306				7.1	7.1
Mon-07	7.4			7.5	308				10.9	10.8
Tue-08	7.3			7.4	352				9.1	9.1
Wed-09	7.4			7.5	288				8.0	8.0
Thu-10	7.4			7.4	392				6.3	6.3
Fri-11	7.4			7.5	536				6.1	6.1
Sat-12	7.4	7.5		7.4	316	102			5.1	5.1
Sun-13	7.4			7.3	300				6.5	6.5
Mon-14	7.4			7.4	357				6.2	6.2
Tue-15	7.4	7.3		7.4	452	66			6.5	6.5
Wed-16	7.3	7.4		7.3	490	89			5.7	5.7
Thu-17	7.2	7.3		7.2	366	64			3.3	3.3
Fri-18	7.3	7.4		7.2	380	94			3.7	3.7
Sat-19	7.4	7.3		7.2	292	94			4.0	4.0
Sun-20	7.4	7.3		7.1	444	80			3.9	3.9
Mon-21	7.4	7.3		7.4	104	77			3.0	3.0
Tue-22	7.3	7.3		7.3	292	54			2.4	2.4
Wed-23	7.4	7.3		7.2	252	66			2.5	2.5
Thu-24	7.4	7.4		7.2	312	83			3.9	3.9
Fri-25	7.3	7.4		7.2	320	71			2.8	2.8
Sat-26	7.3	7.4		7.3	308	77			2.4	2.4
Sun-27	7.2	7.3		7.3	308	89			2.0	2.0
Mon-28	7.4	7.4		7.3	528	99			2.6	2.6
Tue-29	7.3	7.6		7.3	343	55			3.3	3.3
Wed-30	7.5	7.4		7.2	120	76			2.4	2.4
Thu-31	7.3	7.4		7.3	76	99			2.4	2.4
Average	7.3	7.4	---	7.3	325	80	---	---	4.6	4.6
Minimum	7.2	7.3	---	7.1	76	54	---	---	2.0	2.0
Maximum	7.5	7.6	---	7.6	536	102	---	---	10.9	10.9
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	OUTFALL 10 FE
Tue-01	342				3	3	8.32				0.25	0.25
Wed-02	292				2	2	7.21				0.25	0.25
Thu-03	331				3	3	7.46				0.28	0.28
Fri-04	345				3	3	7.07				0.25	0.25
Sat-05	354				3	3	7.02				0.28	0.28
Sun-06	305				4	4	9.42				0.42	0.42
Mon-07	333				5	5	6.56				0.48	0.48
Tue-08	319				4	4	7.11				0.41	0.41
Wed-09	329				4	4	7.16				0.40	0.40
Thu-10	316				4	4	7.22				0.36	0.36
Fri-11	561				3	3	9.20				0.42	0.42
Sat-12	246	101			4	4	5.83	4.08			0.36	0.36
Sun-13	282				4	4	6.78				0.30	0.30
Mon-14	324				3	3	7.10				0.34	0.34
Tue-15	281	90			3	3	6.06	3.72			0.36	0.36
Wed-16	327	90			3	3	5.73	3.46			0.33	0.33
Thu-17	225	84			3	3	5.28	3.37			0.22	0.22
Fri-18	216	104			3	3	5.15	4.07			0.24	0.24
Sat-19	223	102			2	2	5.54	4.78			0.19	0.19
Sun-20	260	137			2	2	6.60	5.68			0.18	0.18
Mon-21	157	104			2	2	4.40	5.11			0.16	0.16
Tue-22	183	81			< 2	2	5.39	3.14			0.14	0.14
Wed-23	156	46			< 2	2	4.85	3.57			0.15	0.15
Thu-24	235	90			2	2	5.51	4.10			0.19	0.19
Fri-25	265	118			2	2	7.06	5.90			0.17	0.17
Sat-26	293	139			2	2	6.06	5.44			0.16	0.16
Sun-27	289	104			< 2	2	6.02	4.97			0.17	0.17
Mon-28	278	111			3	3	6.29	5.04			0.17	0.17
Tue-29	259	91			< 2	2	6.17	4.13			0.20	0.20
Wed-30	183	87			< 2	2	4.33	4.17			0.15	0.15
Thu-31	164	109			2	2	4.31	4.88			0.17	0.17
Average	280	99	---	---	2.8	2.8	6.39	4.42	---	---	0.26	0.26
Minimum	156	46	---	---	< 2	2	4.31	3.14	---	---	0.14	0.14
Maximum	561	139	---	---	5	5	9.42	5.90	---	---	0.48	0.48
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH_3-N (mg/L) RAW	OUTFALL 30	OUTFALL 20	EPEPS	OUTFALL 10 FEC	OUTFALL 10 FE	TKN (mg/L) RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC	NO_x+NO_3 (mg/L) RAW	OUTFALL 30	OUTFALL 20	OUTFALL 10 FEC
Tue-01	42.1				2.43	2.43	57.2			4.0				11.2
Wed-02	36.9				2.34	2.34	51.8			4.4	< 0.01			12.3
Thu-03	36.6				1.70	1.70	58.4			3.6				12.4
Fri-04	34.3				2.20	2.20	59.1			3.8				11.8
Sat-05	36.7				3.58	3.58	58.7			5.4				11.3
Sun-06	34.9				3.90	3.90	83.7			5.6				11.0
Mon-07	36.0				4.18	4.18	52.7			5.9				10.8
Tue-08	35.6				3.36	3.36	61.0			4.9				11.6
Wed-09	35.9				3.49	3.49	59.5			5.8	< 0.01			11.2
Thu-10	37.0				4.18	4.18	57.5			6.6				11.4
Fri-11	35.6				4.39	4.39	69.5			6.3				12.1
Sat-12	32.2	29.9			3.04	3.04	48.6	40.4		5.3		0.01		12.7
Sun-13	36.8				1.79	1.79	52.7			3.4				11.1
Mon-14	38.0				3.93	3.93	52.8			5.1				11.4
Tue-15	28.4	27.4			2.74	2.74	46.2	37.8		4.6		0.36		12.7
Wed-16	22.9	24.0			1.07	1.07	41.2	28.5		2.8	0.02	0.44		9.39
Thu-17	26.8	23.0			1.05	1.05	37.3	28.8		2.1		0.16		8.73
Fri-18	25.5	20.5			1.60	1.60	37.6	31.7		2.8		0.26		8.87
Sat-19	25.9	29.7			1.79	1.79	42.2	39.6		3.4		0.02		8.59
Sun-20	23.3	33.6			2.16	2.16	50.6	45.9		3.8		0.03		9.51
Mon-21	28.2	30.3			3.31	3.31	36.7	40.1		4.3		0.03		9.98
Tue-22	24.0	25.1			2.32	2.32	38.0	32.2		3.3		0.07		9.34
Wed-23	22.7	23.3			1.33	1.33	36.9	32.1		2.6	0.02	0.13		8.03
Thu-24	26.2	28.2			1.16	1.16	38.3	36.2		2.1		0.75		7.53
Fri-25	32.7	34.1			3.10	3.10	44.3	41.0		4.2		1.10		9.22
Sat-26	33.8	35.8			3.98	3.98	52.2	43.3		5.4		1.05		9.62
Sun-27	33.0	33.6			3.55	3.55	44.3	41.4		5.1		1.12		9.09
Mon-28	32.5	35.6			2.28	2.28	49.0	43.5		3.4		2.68		10.8
Tue-29	31.1	31.9			2.52	2.52	43.8	38.7		3.6		1.26		10.9
Wed-30	29.9	31.8			1.76	1.76	36.3	38.3		3.1	0.01	1.25		10.6
Thu-31	30.7	33.6			2.07	2.07	36.6	41.1		3.0		0.84		8.89
Average	31.8	29.5	---	---	2.65	2.65	49.5	37.8	---	4.2	0.01	0.64	---	10.5
Minimum	22.7	20.5	---	---	1.05	1.05	36.3	28.5	---	2.1	< 0.01	0.01	---	7.53
Maximum	42.1	35.8	---	---	4.39	4.39	83.7	45.9	---	6.6	0.02	2.68	---	12.7
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---

DATE	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
Tue-01	99.3			114				6
Wed-02	119			110				3
Thu-03	124			131				7
Fri-04	153			150				2
Sat-05	127			159				4
Sun-06	197			150				2
Mon-07	175			229				4
Tue-08	114			205				6
Wed-09	102			147				5
Thu-10	104			117				5
Fri-11	96			111				5
Sat-12	290	443		118		0.1		2
Sun-13	127			240				4
Mon-14	142			152				5
Tue-15	255	390		175	2.3	1.8		4
Wed-16	190	237		230		1.5		1
Thu-17	150	177		190		1.1		2
Fri-18	145	180		158		1.1		2
Sat-19	136	154		149		1.2		4
Sun-20	267	311		142		1.5		4
Mon-21	129	163		211		1.6		1
Tue-22	114	124		143		1.4		1
Wed-23	124	140		123	1.1	1.0		3
Thu-24	126	136		131		0.8		4
Fri-25	118	134		127		1.7		1
Sat-26	194	410		135		1.6		2
Sun-27	122	177		220		1.6		1
Mon-28	166	209		145		1.4		2
Tue-29	134	134		157		1.3		3
Wed-30	118	130		122		1.1		1
Thu-31	120	137		118		1.3		1
Average	146	210	---	155	1.7	1.3	---	3
Minimum	96.0	124	---	110	1.1	0.11	---	1
Maximum	290	443	---	240	2.3	1.8	---	7
GeoMean	---	---	---	---	1.6	1.2	---	3
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
189	189	100%	288	288	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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