PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report

Digested Sludge: Total Monthly Volume (ML)	64.3

Volume of Flow (ML)

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	UV Disinfected OUTFALL 10 FEC	UV Disinfected OUTFALL 10 FE
Wed-01	342.0	0.0	248.1	0.0	0.0	8.9	0.0	239.2	239.2
Thu-02	333.5	0.0	250.8	0.0	0.0	9.1	0.0	241.7	241.7
Fri-03	325.5	0.0	249.8	0.0	0.0	8.7	0.0	241.1	241.1
Sat-04	352.9	0.0	246.7	0.0	0.0	9.2	0.0	237.5	237.5
Sun-05	342.5	0.0	243.7	0.0	0.0	8.4	0.0	235.3	235.3
Mon-06	387.2	0.0	261.1	0.0	0.0	9.1	0.0	252.0	252.0
Tue-07	556.8	0.0	294.2	30.9	0.0	8.9	0.0	254.4	254.4
Wed-08	540.6	0.0	295.4	26.6	0.0	8.7	0.0	260.1	260.1
Thu-09	646.8	0.0	327.6	64.4	0.0	9.6	0.0	253.6	253.6
Fri-10	740.1	0.0	393.7	105.2	0.0	8.5	0.0	280.0	280.0
Sat-11	445.7	0.0	301.8	4.7	0.0	9.4	0.0	287.7	287.7
Sun-12	365.2	0.0	261.0	0.0	0.0	9.4	0.0	251.6	251.6
Mon-13	472.2	0.0	279.5	20.3	0.0	8.2	0.0	251.0	251.0
Tue-14	601.7	0.0	338.8	69.6	0.0	9.2	0.0	260.0	260.0
Wed-15	534.0	0.0	343.7	46.5	0.0	8.7	0.0	288.5	288.5
Thu-16	544.6	0.0	342.5	55.9	0.0	8.4	0.0	278.2	278.2
Fri-17	565.9	0.0	378.4	80.9	0.0	8.4	0.0	289.1	289.1
Sat-18	491.2	0.0	326.9	26.5	0.0	9.1	0.0	291.3	291.3
Sun-19	408.8	0.0	291.2	11.0	0.0	8.5	0.0	271.7	271.7
Mon-20	384.4	0.0	287.6	0.9	0.0	8.5	0.0	278.2	278.2
Tue-21	369.2	0.0	282.9	0.0	0.0	9.0	0.0	273.9	273.9
Wed-22	366.5	0.0	280.3	0.0	0.0	9.2	0.0	271.1	271.1
Thu-23	340.1	0.0	262.9	0.0	0.0	9.0	0.0	253.9	253.9
Fri-24	332.0	0.0	258.8	0.0	0.0	9.4	0.0	249.4	249.4
Sat-25	342.1	0.0	257.4	0.0	0.0	9.7	0.0	247.7	247.7
Sun-26	357.3	0.0	261.6	0.0	0.0	9.3	0.0	252.3	252.3
Mon-27	347.9	0.0	266.2	0.0	0.0	9.4	0.0	256.8	256.8
Tue-28	328.5	0.0	257.6	0.0	0.0	11.2	0.0	246.4	246.4
Wed-29	321.1	0.0	255.4	0.0	0.0	10.5	0.0	244.9	244.9
Thu-30	312.2	0.0	253.6	0.0	0.0	10.3	0.0	243.3	243.3
Average	426.6	0.0	286.6	18.1	0.0	9.1	0.0	259.4	259.4
Minimum	312.2	0.0	243.7	0.0	0.0	8.2	0.0	235.3	235.3
Maximum	740.1	0.0	393.7	105.2	0.0	11.2	0.0	291.3	291.3
GeoMean	---	---	---	---	---	---	---	---	---
TOTAL	---	0	8,599	543	0	274	0	7,782	7,782

Liquid Stream Quality

DATE	pH@25°C RAW	pH OUTFALL 30	pH OUTFALL 20	pH OUTFALL 10 FEC	TSS (mg/L) RAW	TSS OUTFALL 30	TSS OUTFALL 20	TSS EPEPS	TSS OUTFALL 10 FEC	TSS OUTFALL 10 FE
Wed-01	7.5			7.5	320				2.8	2.8
Thu-02	7.5			7.5	332				3.7	3.7
Fri-03	7.5			7.7	304				2.6	2.6
Sat-04	7.6			7.6	216				1.7	1.7
Sun-05	7.6			7.6	368				4.1	4.1
Mon-06	7.5			7.6	332				4.6	4.6
Tue-07	7.5	7.6		7.7	400	68			4.6	4.6
Wed-08	7.5	7.5		7.6	356	56			5.5	5.5
Thu-09	7.5	7.4		7.6	320	65			3.9	3.9
Fri-10	7.5	7.5		7.6	328	57			5.6	5.6
Sat-11	7.5	7.5		7.4	260	66			24.6	24.6
Sun-12	7.5			7.6	300				4.1	4.1
Mon-13	7.4	7.4		7.6	320	82			3.9	3.9
Tue-14	7.6	7.6		7.7	316	78			3.5	3.5
Wed-15	7.6	7.5		7.5	288	51			6.5	6.5
Thu-16	7.5	7.5		7.6	244	60			7.8	7.8
Fri-17	7.6	7.4		7.6	196	78			3.6	3.6
Sat-18	7.5	7.5		7.5	260	58			5.0	5.0
Sun-19	7.5	7.5		7.7	276	90			4.0	4.0
Mon-20	7.7	7.8		7.8	266	105			4.3	4.3
Tue-21	7.6	7.7		7.7	256	130			7.1	7.1
Wed-22	7.5			7.8	255				7.6	7.6
Thu-23	7.5			7.7	328				4.4	4.4
Fri-24	7.4			7.7	337				4.0	4.0
Sat-25	7.5			7.7	196				5.8	5.8
Sun-26	7.5			7.8	304				10.2	10.2
Mon-27	7.4			7.7	288				8.0	8.0
Tue-28	7.5			7.7	311				9.8	9.8
Wed-29	7.5			7.7	364				7.0	7.0
Thu-30	7.5			8.0	352				8.4	8.4
Average	7.5	7.5	---	7.6	300	75	---	---	6.0	6.0
Minimum	7.4	7.4	---	7.4	196	51	---	---	1.7	1.7
Maximum	7.7	7.8	---	8.0	400	130	---	---	24.6	24.6
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	TP OUTFALL 30	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE
Wed-01	335				2.0	2.0	7.90				0.22	0.22
Thu-02	305				3.0	3.0	7.90				0.22	0.22
Fri-03	314				3.0	3.0	7.94				0.21	0.21
Sat-04	212				3.0	3.0	7.20				0.19	0.19
Sun-05	302				2.0	2.0	8.37				0.24	0.24
Mon-06	284				3.0	3.0	8.35				0.26	0.26
Tue-07	349	117			3.0	3.0	8.91	5.23			0.27	0.27
Wed-08	321	135			3.0	3.0	8.82	5.87			0.28	0.28
Thu-09	218	116			2.0	2.0	7.33	5.11			0.24	0.24
Fri-10	220	119			3.0	3.0	6.18	4.56			0.22	0.22
Sat-11	263	125			6.0	6.0	6.75	4.19			0.91	0.91
Sun-12	303				4.0	4.0	8.27				0.24	0.24
Mon-13	319	193			3.0	3.0	8.17	6.54			0.23	0.23
Tue-14	296	134			3.0	3.0	6.88	5.15			0.21	0.21
Wed-15	254	130			4.0	4.0	6.41	5.00			0.36	0.36
Thu-16	288	345			4.0	4.0	6.38	5.22			0.44	0.44
Fri-17	187	103			2.0	2.0	5.88	4.84			0.19	0.19
Sat-18	246	132			3.0	3.0	6.49	5.01			0.28	0.28
Sun-19	228	133			2.0	2.0	7.12	5.70			0.20	0.20
Mon-20	302	150			3.0	3.0	6.29	5.24			0.20	0.20
Tue-21	290	292			4.0	4.0	6.79	10.5			0.53	0.53
Wed-22	257				4.0	4.0	7.41				0.33	0.33
Thu-23	280				3.0	3.0	9.58				0.29	0.29
Fri-24	310				3.0	3.0	7.83				0.25	0.25
Sat-25	289				4.0	4.0	6.02				0.28	0.28
Sun-26	361				6.0	6.0	7.12				0.50	0.50
Mon-27	293				5.0	5.0	7.45				0.41	0.41
Tue-28	357				6.0	6.0	7.73				0.36	0.36
Wed-29	307				5.0	5.0	7.85				0.33	0.33
Thu-30	339				5.0	5.0	7.62				0.32	0.32
Average	288	159	---	---	3.5	3.5	7.43	5.58	---	---	0.31	0.31
Minimum	187	103	---	---	2.0	2.0	5.88	4.19	---	---	0.19	0.19
Maximum	361	345	---	---	6.0	6.0	9.58	10.5	---	---	0.91	0.91
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH3-N (mg/L) RAW	NH3-N OUTFALL 30	NH3-N OUTFALL 20	NH3-N EPEPS	NH3-N OUTFALL 10 FEC	NH3-N OUTFALL 10 FE	TKN (mg/L) RAW	TKN OUTFALL 30	TKN OUTFALL 20	TKN OUTFALL 10 FEC
Wed-01	38.5				2.92	2.92	61.4			5.40
Thu-02	42.0				3.97	3.97	63.0			5.80
Fri-03	42.2				4.32	4.32	62.2			6.70
Sat-04	40.8				4.42	4.42	59.2			6.10
Sun-05	43.9				4.64	4.64	65.1			6.40
Mon-06	30.8				5.17	5.17	64.4			6.90
Tue-07	36.1	38.7			5.03	5.03	63.8	50.4		7.10
Wed-08	31.7	35.0			3.99	3.99	57.5	47.1		5.70
Thu-09	30.4	31.4			3.22	3.22	50.6	42.5		5.00
Fri-10	25.8	27.2			1.45	1.45	43.7	36.6		3.30
Sat-11	32.8	26.3			2.75	2.75	52.1	36.0		5.80
Sun-12	39.9				5.40	5.40	63.3			6.90
Mon-13	36.9	38.8			4.91	4.91	59.6	53.6		7.10
Tue-14	30.1	32.0			2.70	2.70	51.0	42.6		4.80
Wed-15	28.3	32.2			2.10	2.10	47.0	43.1		4.50
Thu-16	27.7	27.4			3.05	3.05	48.3	44.8		5.30
Fri-17	29.0	24.2			2.80	2.80	49.0	46.9		5.10
Sat-18	31.6	35.0			3.66	3.66	51.9	47.2		5.60
Sun-19	34.4	31.0			5.50	5.50	57.3	53.6		7.80
Mon-20	35.7	33.1			4.97	4.97	52.7	46.8		6.70
Tue-21	32.0	49.0			3.66	3.66	55.2	65.8		6.10
Wed-22	37.5				2.65	2.65	56.1			4.80
Thu-23	39.0				4.48	4.48	72.9			6.80
Fri-24	36.9				4.46	4.46	61.9			6.20
Sat-25	35.7				2.70	2.70	49.4			4.60
Sun-26	35.7				2.16	2.16	59.4			4.40
Mon-27	36.6				2.29	2.29	58.9			4.70
Tue-28	38.0				2.52	2.52	61.5			4.90
Wed-29	38.8				2.31	2.31	60.2			4.40
Thu-30	31.5				2.25	2.25	62.1			4.30
Average	35.0	33.0	---	---	3.55	3.55	57.4	46.9	---	5.64
Minimum	25.8	24.2	---	---	1.45	1.45	43.7	36.0	---	3.30
Maximum	43.9	49.0	---	---	5.50	5.50	72.9	65.8	---	7.80
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	NO$_2$+NO$_3$ (mg/L) RAW	NO$_2$+NO$_3$ OUTFALL 30	NO$_2$+NO$_3$ OUTFALL 20	NO$_2$+NO$_3$ OUTFALL 10 FEC	Chloride (mg/L) RAW	Chloride OUTFALL 30	Chloride OUTFALL 20	Chloride OUTFALL 10 FEC	*E. coli* (Counts/100 mL) RAW X10^6	*E. coli* OUTFALL 30 X10^6	*E. coli* OUTFALL 20 X10^6	*E. coli* OUTFALL 10 FEC
Wed-01	< 0.01			8.27	110			129				7
Thu-02				8.72	111			113	2.6			7
Fri-03				9.38	108			114				5
Sat-04				8.72	126			112				5
Sun-05				10.6	100			126				10
Mon-06				9.64	174			113				22
Tue-07		0.20		7.75	168	204		171		1.6		14
Wed-08	0.01	0.26		6.44	119	138		157		2.2		6
Thu-09		0.37		6.70	126	148		126	2.1	1.4		6
Fri-10		0.42		6.66	140	148		135		1.3		11
Sat-11		0.20		6.07	102	131		132		1.0		21
Sun-12				6.89	83			104				17
Mon-13		0.04		7.15	100	126		94		4.6		6
Tue-14		0.60		6.29	104	112		104		6.5		12
Wed-15	< 0.01	0.28		6.17	106	118		102		3.3		14
Thu-16		0.39		5.25	100	111		104		1.6		12
Fri-17		0.56		6.14	106	110		102		1.5		13
Sat-18		0.62		7.02	95	100		103		1.5		14
Sun-19		0.45		8.71	103	99		102		1.8		10
Mon-20		0.48		8.98	108	98		103		1.0		5
Tue-21				8.04	113			112				8
Wed-22	0.08			7.51	108			116				12
Thu-23				6.21	105			115				9
Fri-24				7.14	106			121				11
Sat-25				7.85	91			107				5
Sun-26				7.83	104			103				5
Mon-27				7.56	103			99				5
Tue-28				8.03	99			106				12
Wed-29	< 0.01			7.99	99			102				9
Thu-30				8.86	91			97				17
Average	0.02	0.37	---	7.62	110	126	---	114	---	---	---	---
Minimum	< 0.01	0.04	---	5.25	83	98	---	94	2.1	1.0	---	5
Maximum	0.08	0.62	---	10.6	174	204	---	171	2.6	6.5	---	22
GeoMean	---	---	---	---	---	---	---	---	2.3	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
108	108	100%	165	165	100%

Report Comments

1	RAW - April 6: Analysis of the sample exceeded the recommended hold time for BOD.
2	OUTFALL 30 - Not enough sample to run Chloride or N-TOX analyses.

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

Alfredo Suarez

Senior Manager, Operations

Shane Harnish

Senior Manager, Analytical Operations