

2016 ENVIRONMENT SUMMARY

Table 1. Effluent Discharges

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	2015	Target	Permit
Flow	(ML/d)	73.9	56.3	55.3	50.2	54.7	37.6	52.9	52.9	48.9	50.6	57.3	53.5	53.7	61.0		106.5
BOD	(kg/d)	1,324	572	484	529	546	582	429	523	466	445	457	557	576	1,086		
	(kg/t)	0.7	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.6	<1.0	3.95
TSS	(kg/d)	4,873	1,370	1,280	1,229	1,232	1,638	944	789	2,490	2,573	1,160	1,311	1,741	2,483		
	(kg/t)	2.5	0.7	0.7	0.6	0.6	0.8	0.5	0.4	1.3	1.3	0.6	0.7	0.9	1.3	<2.0	6.1
AOX	(kg/d)	389	242	315	315	352	124	304	316	347	259	363	351	306	341		
	(kg/t)	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.3	<0.40	0.48
COD	(kg/d)	16,703	20,122	28,618	19,601	21,629	15,410	23,965	32,576	35,058	34,392	32,814	33,198	26,174	33,214		
	(kg/t)	8.7	10.4	14.8	10.2	11.2	8.0	12.4	16.9	18.2	17.8	17.0	17.2	13.6	17.2		
Effluent Trout	No.	1	1	1	1	1	1	1	1	1	1	1	1	12	19		
	Pass	1	1	1	1	1	1	1	1	1	1	1	1	12	15	100%	100%
Effluent Daphnia	No.	4	4	5	4	5	4	4	5	4	4	5	4	52	54		
	Pass	4	4	5	4	5	4	4	5	4	4	5	4	52	52	100%	100%
CWS Trout	No.	1	1	1	1	1	1	1	1	1	1	1	1	12	12		
	Pass	1	1	1	1	1	1	1	1	1	1	1	1	12	12	100%	100%
CWS Daphnia	No.	1	1	1	1	1	1	1	1	1	1	1	1	12	12		
	Pass	1	1	1	1	1	1	1	1	1	1	1	1	12	12	100%	100%

TSS, BOD, AOX and Flow are averages; Toxicities are totals

Table 2. Landfill Volumes (average cubic metres)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	%	2015
Ash	2,286	1,785	1,857	1,060	1,080	1,153	1,591	2,232	1,674	2,803	2,316	1,927	1,814	52.4	1,875
Lime Mud/ Dregs/ Grits	1,001	1,063	1,022	1,435	1,022	1,445	970	588	392	650	1,311	1,373	1,023	29.5	466
Brown Fibre Rejects	144	190	293	33	165	41	165	244	157	186	116	128	155	4.5	161
Effluent Sludge	196	330	279	279	1,393	62	372	289	981	310	568	206	439	12.7	372
Other	0	0	21	93	93	0	165	0	0	0	0	10	32	0.9	7
Gravel	0	10	0	0	0	0	0	0	0	0	62	0	6		9

Table 3. Landfill Volumes (total cubic metres)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	Projected	2015
TOTAL (excl. gravel)	3,627	3,368	3,471	2,900	3,753	2,702	3,263	3,353	3,203	3,949	4,310	3,645	3,462	41,543	34,579

TARGET: <80,000 cubic metres/year PERMIT: <92,500 cubic metres/year

2016 ENVIRONMENT SUMMARY

Table 4. Air Emissions

			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	2015	Target	Permit
Power Boiler	PM	mg/m ³	5				4				31			3	11	8	<100	115***
	SO₂	mg/m ³	170	160	171	108	72	58	139	139	86	115	207	96	127	158	<200	300
	NO_x*	mg/m ³	206	192	153	132	82	96	168	159	111	216	140	185	153	161		300
	NO_x**	mg/m ³	231	225	190	141	160	100	172	159	125	223	141	200	172	208		450
Recovery Boiler	TRS	mg/m ³	0.4	0.5	0.4	0.4	0.4	0.7	0.2	0.3	0.4	0.8	2.5	0.3	0.6	0.6833	<1.0	5.0
	PM	mg/m ³	54.2			106				41.9				96.4	74.6	59	<50	150
Kiln	PM	mg/m ³	37.8			54.2				6.3				2.4	25.2	45.875	<20	100
Smelt Tk.	PM	mg/m ³	98			118				115				99	107	112	<125	200
Misc.	TRS	g/adut	1.9	111.5	13.9	67.9	13.4	13.7	19.8	69.5	12.5	0.5	0.5	0.6	27.1	0.2497	<75	110
CNCG	vent	min	3	0	0	89	11	72	496	1	51	35	0	0	758	2,530		
DNCG	vent	min	432	581	628	652	19,200	1,987	213	481	14,776	908	245	3,562	43,665	46,579		
Langdale	TRS	hrs>A	9	2	1	0	3	0	0	0	0	2	0	1	18	20		

* excluding time when >60 t/h steam from gas

**all time

12 month rolling average, single test not to be > 230

All data are averages, except NCG venting and hours >A Level, which are totals