HOWE SOUND
PULP & PAPER CORPORATION
A PAPER EXCELLENCE COMPANY

2012 ENVIRONMENT SUMMARY

Table 1. Effluent Discharges

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	2011	Target	Permit
Flow	(ML/d)	74.7	75.8	75.1	72.6	71.2	71.5	58.1	75.3	68.9	68.7	73.1	74.4	71.6	72.5		106.5
BOD	(kg/d)	556	286	212	488	568	664	475	514	988	986	1,666	1,962	780	548		
	(kg/t)	0.3	0.1	0.1	0.2	0.3	0.3	0.2	0.3	0.5	0.5	0.8	1.0	0.4	0.3	<1.0	3.95
TSS	(kg/d)	2,781	2,243	3,436	2,692	3,006	3,212	1,710	2,694	5,932	3,285	5,630	5,332	3,496	2,920		
	(kg/t)	1.4	1.2	1.8	1.3	1.5	1.6	0.8	1.3	3.2	1.6	2.8	2.6	1.8	1.5	<2.0	6.1
AOX	(kg/d)	334	328	293	347	396	257	142	223	353	420	297	312	308	286		
	(kg/t)	0.3	0.3	0.2	0.3	0.3	0.2	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	<0.40	0.48
COD	(kg/d)	--	--	--	--	54,329	51,817	48,347	45,739	55,598	48,378	59,225	45,943	51,172	54,956		
	(kg/t)	--	--	--	--	28.1	26.8	25.1	23.7	28.8	25.1	30.7	23.8	26.5	28.1		
Effluent	No.	4	1	1	2	1	1	4	1	1	1	1	1	19	16		
Trout	Pass	3	1	1	2	1	1	3	1	1	1	1	1	17	15	100%	100%
Effluent	No.	5	5	4	7	5	4	5	4	4	5	4	4	56	52		
Daphnia	Pass	4	5	4	4	5	4	5	4	3	5	4	4	51	49	100%	100%
CWS	No.	1	1	1	1	1	1	1	1	1	1	1	1	12	12		
Trout	Pass	1	1	1	1	1	1	1	1	1	1	1	1	12	12	100%	100%
CWS	No.	1	1	1	1	1	1	1	1	1	1	1	1	12	12		
Daphnia	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	2011	%
Ash	2,190	2,601	2,486	3,505	3,869	3,707	2,907	4,257	3,155	3,305	3,684	3,146	3,234	2,555	3.2
Lime Mud/ Dregs/ Grits	1,476	1,734	1,703	3,850	1,146	1,290	1,455	712	609	1,455	1,197	846	1,456	1,690	2.1
Brown Fibre Rejects	3,055	3,643	1,693	1,589	1,404	1,321	784	1,208	1,270	1,094	1,321	1,600	1,665	760	0.9
Effluent Sludge	722	10	1,755	21	31	155	2,178	495	0	1,197	237	41	570	2,016	2.5
Other	186	186	237	0	320	4,129	175	21	72	31	0	0	446	104	0.1
Gravel	165	0	0	0	0	0	0	0	0	0	0	31	16	162	
													7388.7	7287.0	

Table 3. Landfill Volumes (total cubic metres)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	Projected	2011
TOTAL (excl. gravel)	7,630	8,175	7,874	8,965	6,770	10,601	7,500	6,693	5,106	7,083	6,439	5,633	7,372	88,468	80,393

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

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Table 4. Air Emissions

			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	2011	Target	Permit
Power Boiler	**PM**	mg/m3	11			5				6			11		8	15	<100	115***
	SO2	mg/m3	45	143	148	108	135	116	61	77	83	126	169	140	113	127	<200	300
	NOx*	mg/m3	57	199	162	147	176	174	172	107	189	175	205	206	164	201		300
	NOx**	mg/m3	87	232	213	272	285	182	193	113	192	213	235	223	203	239		450
Recovery Boiler	**TRS**	mg/m3	0.73	0.823	0.8	0.9	0.9	0.9	0.8	0.7	0.6	1	0.5	1.1	0.8	0.6	<1.0	5.0
	PM	mg/m3	48.8			39.5				25.8			59.4		43.4	44.5	<50	150
Kiln	**PM**	mg/m3	12.3			8				7.8			17.3		11.4	26.8	<20	100
Smelt Tk.	**PM**	mg/m3	69			70				70			156		91	101	<125	200
Misc.	**TRS**	g/adut	0.0	0.0	0.0	5.9	0.0	0.3	22.5	16.2	19.4	6.4	13.4	1466.7	129.2	5.5	<75	110
CNCG	**vent**	min	40	0	7	29	0	132	270	57	19	0	19	17	590	1,073		
DNCG	**vent**	min	2,105	457	6,459	411	1,219	342	12,677	1,532	249	4,779	1,061	323	31,614	114,295		
Langdale	**TRS**	hrs>A	0	0	0	0	0	1	4	0	1	4	0	15	25	57		

* 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