HOWE SOUND
PULP & PAPER CORPORATION
A PAPER EXCELLENCE COMPANY

2011 ENVIRONMENT SUMMARY

Table 1. Effluent Discharges

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	2010	Target	Permit
Flow	(ML/d)	75.1	77.1	78.0	80.6	70.4	58.4	69.1	71.3	72.4	72.6	74.0	71.4	72.5	75.3		106.5
BOD	(kg/d)	594	513	513	521	620	509	509	470	636	533	521	639	548	560		
	(kg/t)	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	<1.0	3.95
TSS	(kg/d)	4,005	2,643	2,643	3,958	3,261	2,450	2,450	1,744	2,171	2,372	3,453	3,891	2,920	2,356		
	(kg/t)	2.1	1.4	1.7	2.1	2.1	1.3	0.8	0.9	1.1	1.2	1.8	1.8	1.5	1.2	<2.0	6.1
AOX	(kg/d)	176	274	274	313	251	166	298	366	346	346	345	276	286	241		
	(kg/t)	0.1	0.2	0.2	0.3	0.3	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	<0.40	0.48
COD	(kg/d)	61,380	53,777	60,284	51,526	58,635	37,397	51,479	55,834	--	54,975	53,921	65,305	54,956	48,412		
	(kg/t)	31.9	28.0	31.4	26.8	30.5	19.5	26.8	29.1	--	28.6	28.1	28.1	28.1	25.7		
Effluent	No.	1	1	1	1	4	1	1	1	1	1	1	2	16	13		
Trout	Pass	1	1	1	1	3	1	1	1	1	1	1	2	15	13	100%	100%
Effluent	No.	4	4	5	4	5	4	4	5	4	4	5	4	52	52		
Daphnia	Pass	4	4	5	4	4	4	4	5	3	4	5	3	49	52	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	2010	%
Ash	4,036	3,149	3,539	2,612	2,700	--	--	292	2,605	1,843	2,194	2,583	2,555	3,566	38.1
Lime Mud/ Dregs/ Grits	1,270	1,837	2,075	1,383	1,517	1,528	1,538	1,352	2,900	1,786	1,569	1,528	1,690	1,789	25.2
Brown Fibre Rejects	789	941	921	917	917	884	524	607	834	458	516	809	760	719	11.3
Effluent Sludge	960	1,631	1,228	1,321	722	3,406	4,294	4,036	2,632	1,218	2,508	237	2,016	655	30.1
Other	165	0	52	72	83	289	0	31	21	0	392	144	104	85	1.6
Gravel	31	268	258	196	62	0	0	0	0	423	52	650	162	91	

Table 3. Landfill Volumes (total cubic metres)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	Projected 2011	Projected 2010
TOTAL (excl. gravel)	7,219	7,558	7,814	6,305	5,939	6,106	6,356	6,318	8,992	5,305	7,179	5,301	6,699	80,393	58,346

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	2010	Target	Permit
Power Boiler	**PM**	mg/m3		35							3		8		15	19	<100	115***
	SO2	mg/m3	119	143	117	126	101			127	99	166	117	150	127	111	<200	300
	NOx*	mg/m3	225	202	284	205	227			116	193	235	168	150	201	167		300
	NOx**	mg/m3	280	237	347	228	240			196	211	249	225	178	239	185		450
Recovery Boiler	**TRS**	mg/m3	0.2	0.4	0.4	0.8	0.5	1.1	0.8	0.8	0.8	0.6	0.8	0.5	0.6	0.3417	<1.0	5.0
	PM	mg/m3		47.2		42.9					47			41	44.5	29	<50	150
Kiln	**PM**	mg/m3		24.4		27.8					30.6		24.2		26.8	24.275	<20	100
Smelt Tk.	**PM**	mg/m3		87		87					122			106	101	108	<125	200
Misc.	**TRS**	g/adut	2.6	2.1	2.1	4.9	7.5	12.6	16.3	3.6	6.4	5.2	2.8	0.0	5.5	9.0374	<75	110
CNCG	**vent**	min	3	24	16	33	23	339	65	352	153	0	1	64	1,073	253		
DNCG	**vent**	min	12	4,880	95	918	88	34,557	44,640	24,274	2,300	767	1,462	302	114,295	42,099		
Langdale	**TRS**	hrs>A	25	4	0	0	0	6	15	3	0	0	0	0	57	27		

* 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