



**HOWE SOUND
PULP & PAPER
CORPORATION**

2010 WASTEWATER TREATMENT REVIEW REPORT

Environment Management Permit 1149

**HOWE SOUND PULP & PAPER CORPORATION
Port Mellon, B. C.**

By:

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January 2011

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SUMMARY

The performance of Howe Sound Pulp and Paper's (HSPP's) effluent treatment system was excellent throughout 2010. Discharges of TSS, BOD₅ and AOX remain well below permitted levels and relatively unchanged from historical levels.

DISCUSSION

The mill's annual average discharges and production rates are compared to previous years in Table 1 and Figures 1 - 5.

HSPP's production increased in 2010 compared to the previous two years, but was still below the levels of years prior to that. However, HSPP's effluent treatment system continued to operate effectively and maintained good treated effluent quality throughout the year. Discharges of all parameters remained within their historical ranges.

All of the 96hr LC₅₀ trout toxicity tests conducted during the year passed.

TABLE 1: TREATED EFFLUENT DISCHARGE COMPARISON

		2008	2009	2010	PERMIT
Total Production (adt)		532,669	473,018	559,668	--
Kraft Pulp Production (adt)		321,220	323,787	364,638	--
Paper Production (adt)		211,449	149,231	195,030	--
Flow (ML/d)		72.3	70.7	75.3	< 106.5
Temperature (°C)		33.3	32.0	33.0	< 38.5
pH		6.4	6.4	6.3	5.5 - 8.0
TSS	(kg/day)	2,273	1,784	2,356	< 11,809
	(kg/adt)	1.2	0.9	1.2	< 7.0
BOD ₅	(kg/day)	981	634	560	< 7,592
	(kg/adt)	0.49	0.33	0.30	< 4.5
AOX	(kg/day)	288	231	241	< 595
	(kg/adt)	0.24	0.19	0.19	< 0.50
96hrLC ₅₀	number of tests	13	12	13	monthly
	number of passes	13	12	13	100%

Notes: Discharges in kg/adt are based on 90th percentile production rates.

TSS and BOD are based on total production, AOX on Kraft production only.

CONCLUSION

HSPP's effluent treatment system continues to operate very well, producing effluent that consistently meets both Provincial and Federal requirements.

Figure 1. TSS Discharges

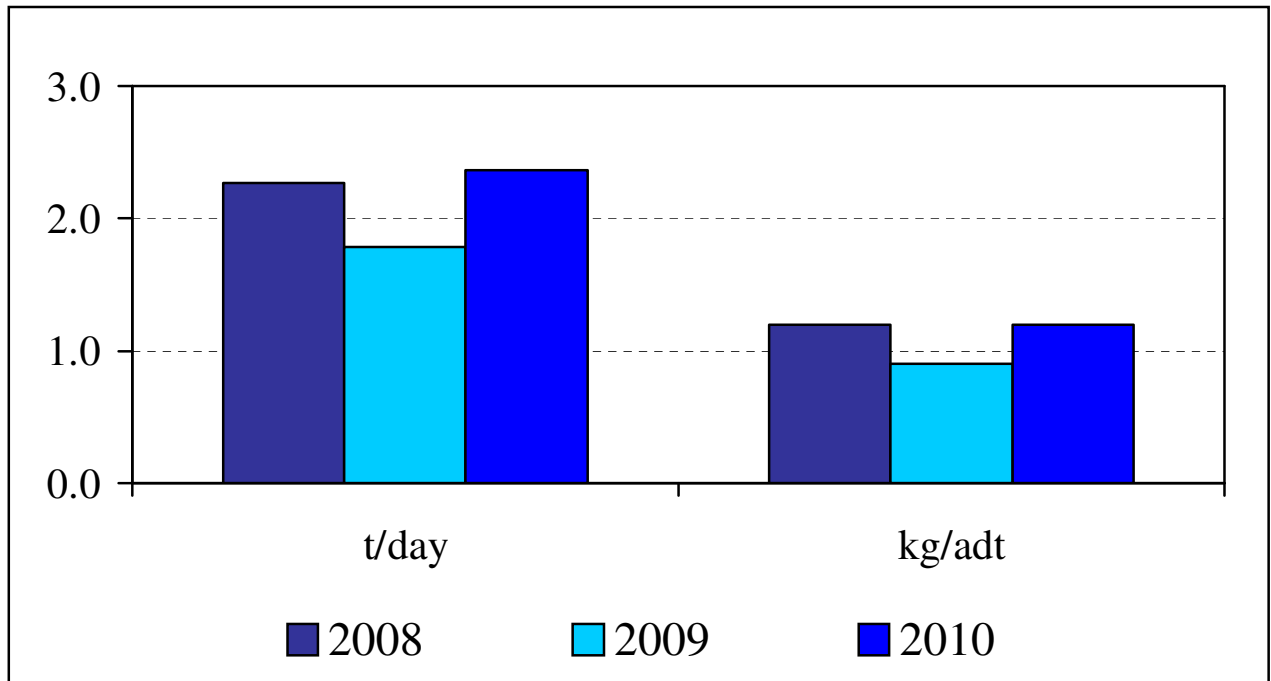


Figure 2. BOD₅ Discharges

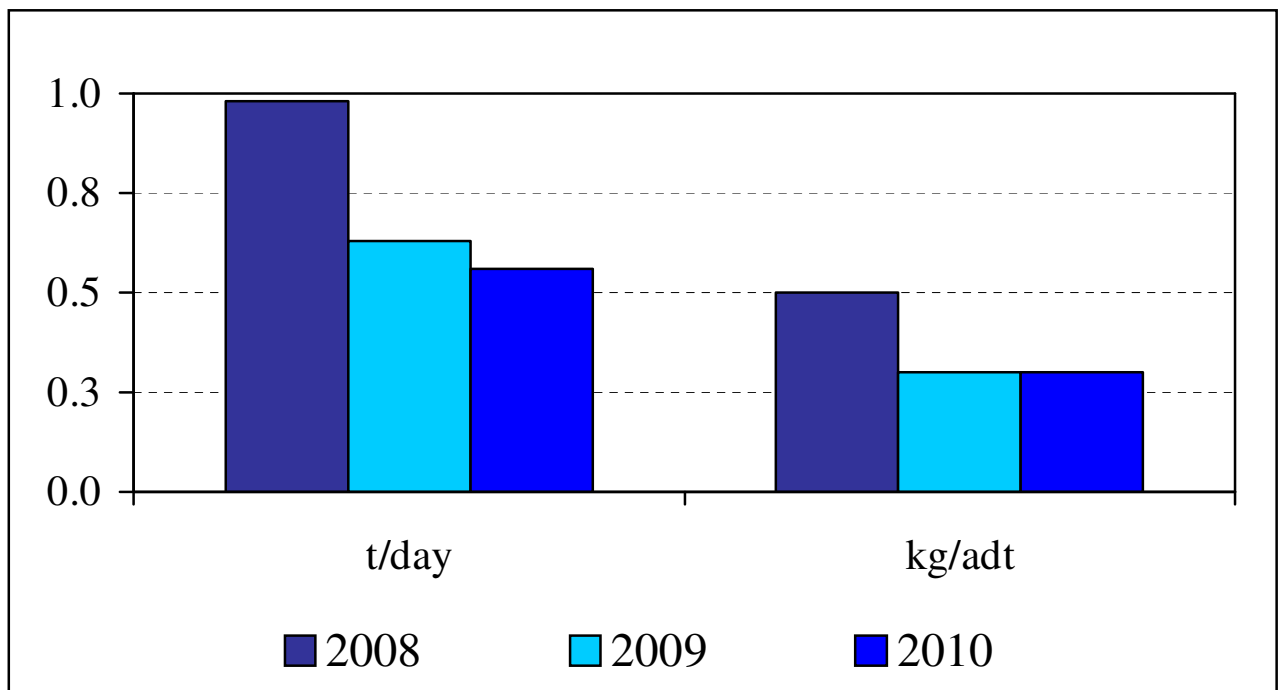


Figure 3. AOX Discharges

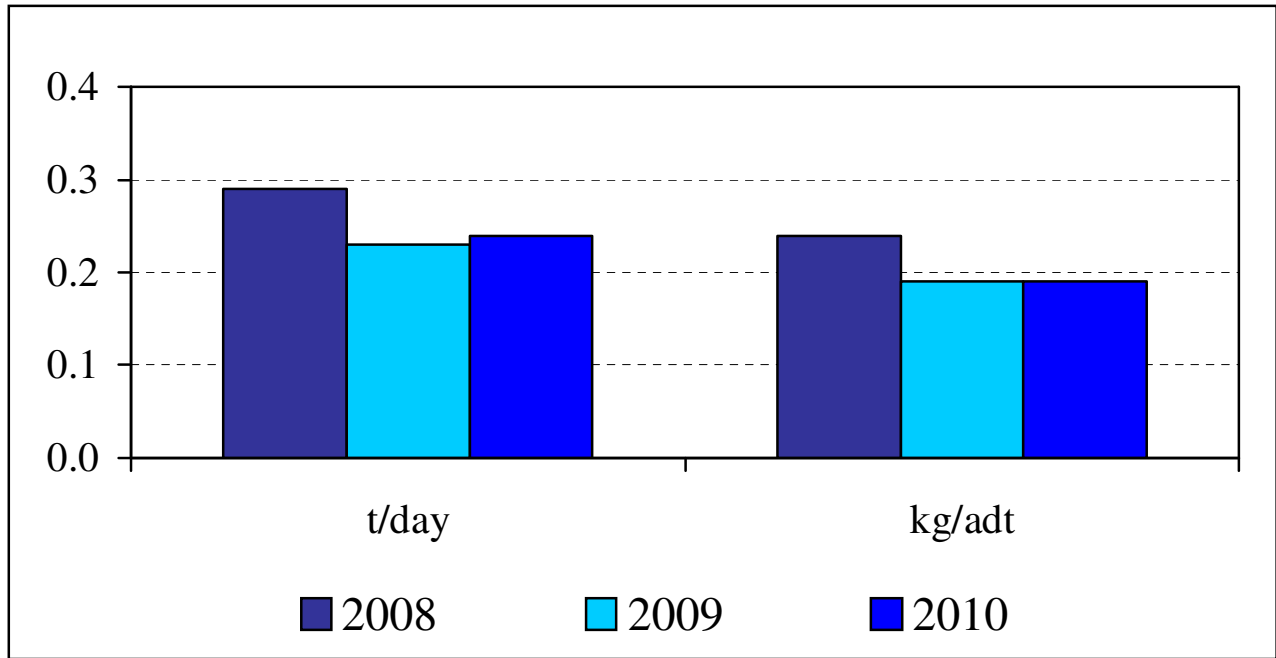


Figure 4. Other Parameters

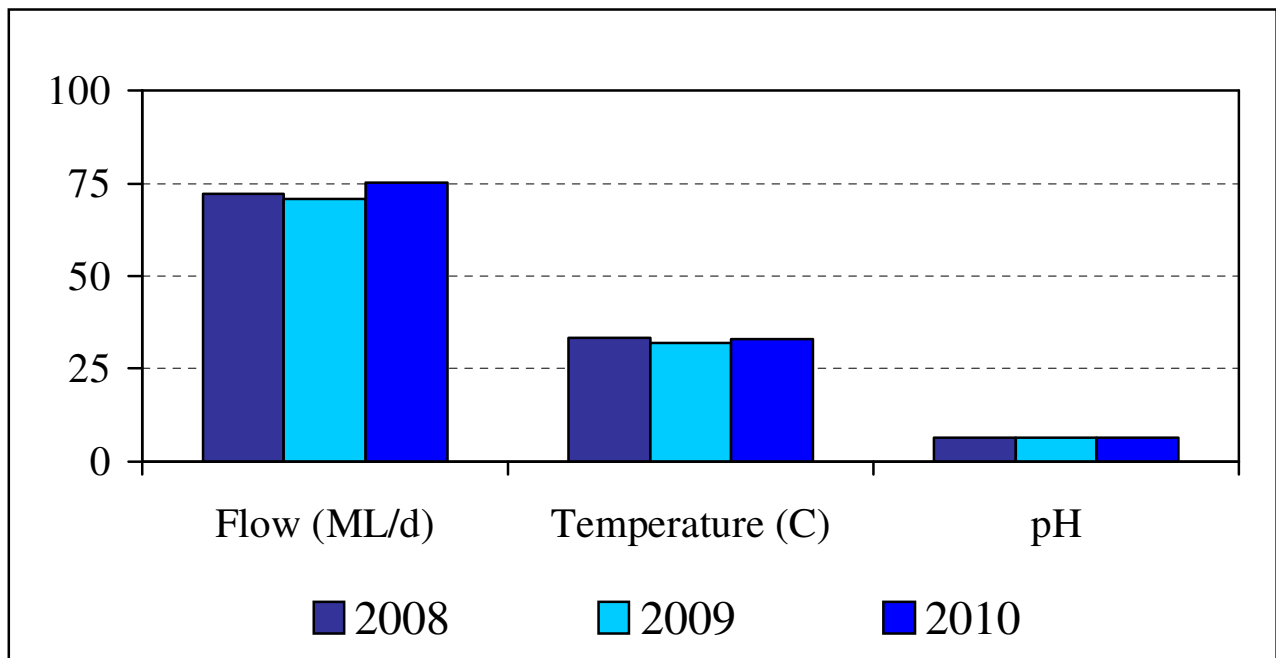


Figure 5. Production Rates

