



## **2009 WASTEWATER TREATMENT REVIEW REPORT**

**Environment Management Permit 1149**

**At:**  
**HOWE SOUND PULP & PAPER LIMITED**  
**Port Mellon, B. C.**

**By:**  
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### SUMMARY

The performance of Howe Sound Pulp and Paper's (HSPP's) effluent treatment system was excellent throughout 2009. Discharges of TSS, BOD<sub>5</sub> and AOX remain well below permitted levels and relatively unchanged from historical levels.

### DISCUSSION

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

HSPP's production declined again in 2009 due to operational difficulties in the kraft pulp mill and curtailment of the paper mill caused by market conditions. However, HSPP's effluent treatment system continued to show its resiliency and maintained good treated effluent quality throughout the year. Discharges of all parameters remained close to their historical rates.

TABLE 1: TREATED EFFLUENT DISCHARGE COMPARISON

		2007	2008	2009	PERMIT
Total Production (adt)		550,708	532,669	473,018	--
Kraft Pulp Production (adt)		362,151	321,220	323,787	--
Newsprint Production (adt)		188,557	211,449	149,231	--
Flow (ML/d)		73.0	72.3	70.7	< 106.5
Temperature (°C)		33.3	33.3	32.0	< 38.5
pH		6.4	6.4	6.4	5.5 - 8.0
TSS	(kg/day)	1,916	2,273	1,784	< 11,809
	(kg/adt)	1.0	1.2	0.9	< 7.0
BOD <sub>5</sub>	(kg/day)	896	981	634	< 7,592
	(kg/adt)	0.5	0.5	0.3	< 4.5
AOX	(kg/day)	261	288	231	< 595
	(kg/adt)	0.21	0.24	0.19	< 0.50

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 Federal and Provincial requirements.

Figure 1. TSS Discharges

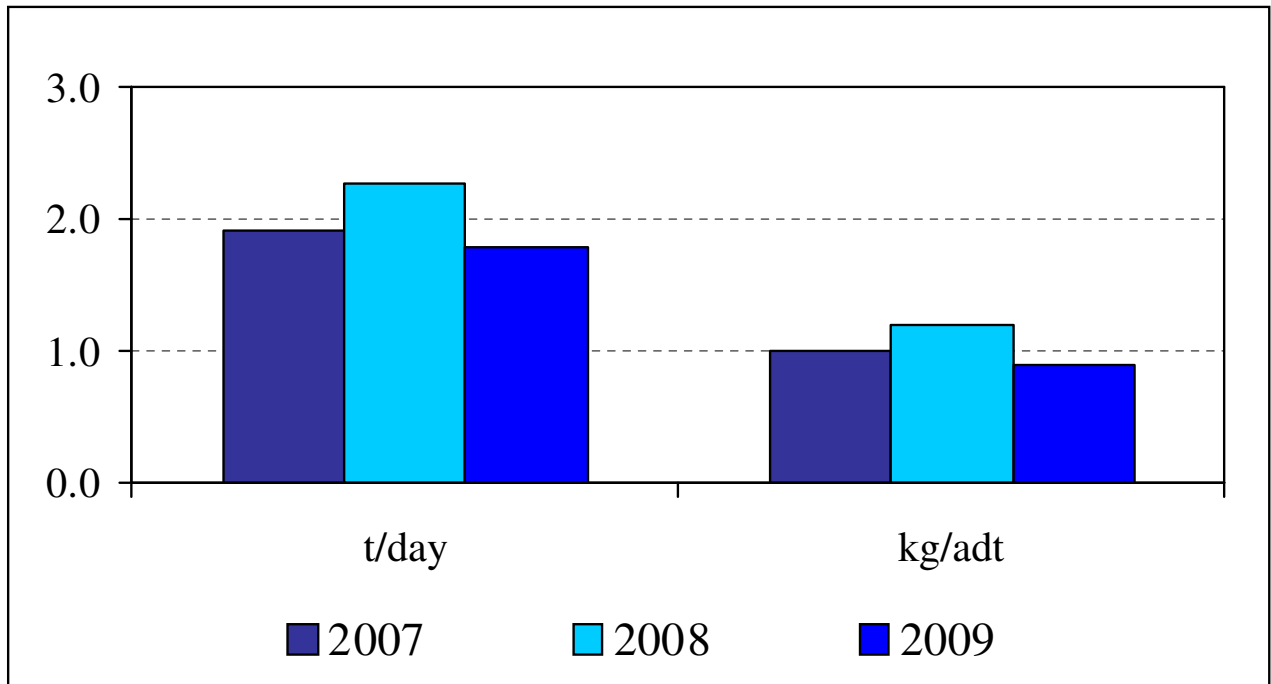


Figure 2. BOD<sub>5</sub> Discharges

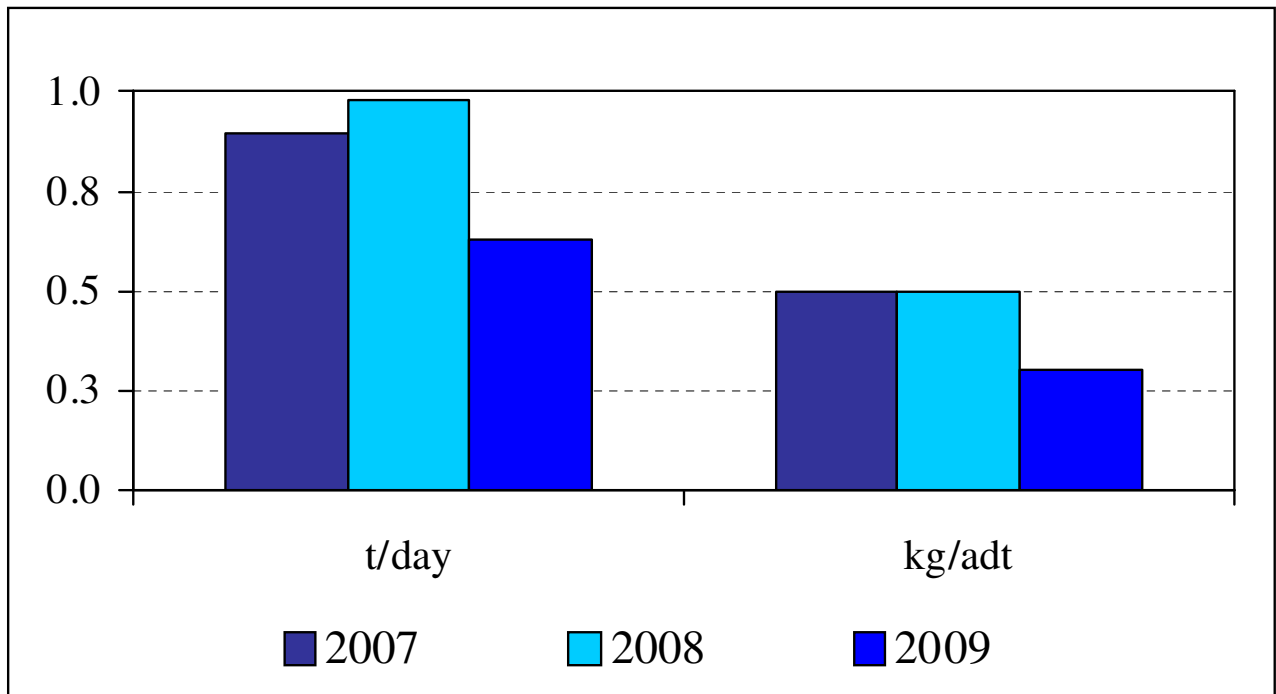


Figure 3. AOX Discharges

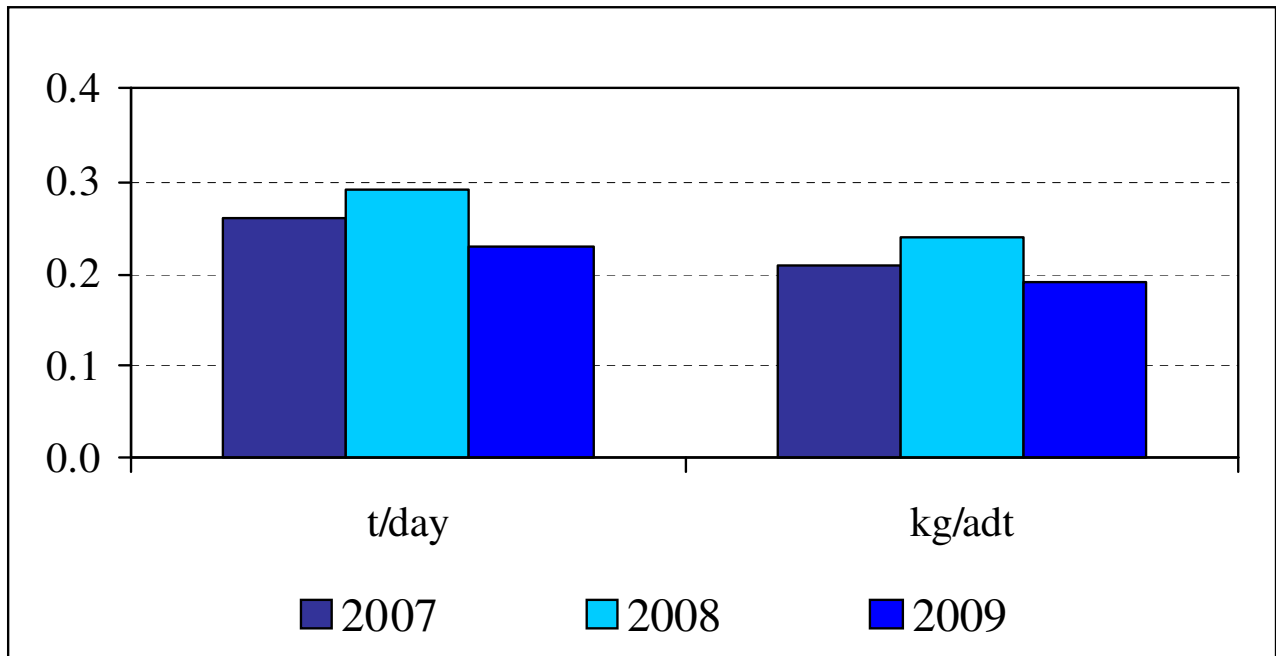


Figure 4. Other Parameters

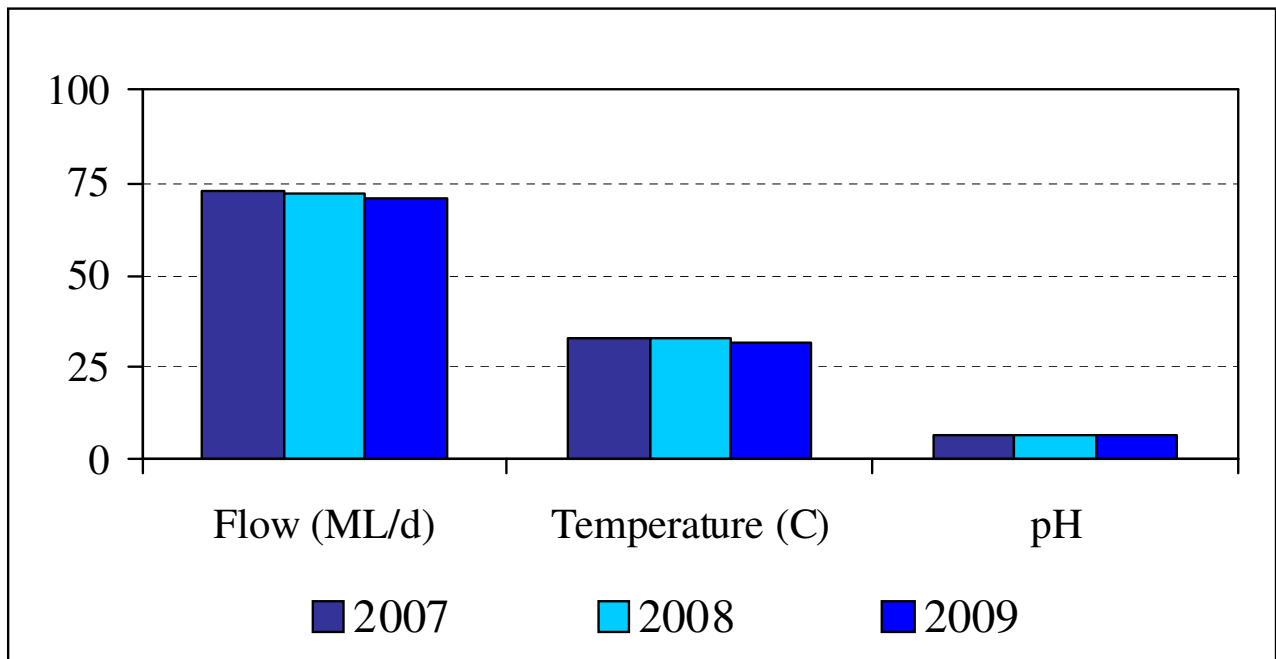


Figure 5. Production Rates

