

The **Forest Industry Health Research Program (FIHRP)** has completed a study on odour and irritation thresholds. A report is now available to members titled "**Sensory Parameters as Indicators of Occupational Overexposure**". To request a copy, phone **Agi Lee** at the Pulp and Paper Forum at (604) 777-1533, send a fax to (604) 777-1567 or E-mail at alee@paperforum.com. Non-members of the Forum may be charged for the reports.

This review was undertaken to examine the use of odour and irritation as indicators of overexposure of workers to selected mill contaminants.

The authors also discussed the physiology of odour and respiratory irritation and their processes. Background theory was provided to develop an understanding of odour threshold, irritation threshold and odour quality.

Findings of the review indicated that some of the mill contaminants selected for this study cannot be detected using odour or irritation at a sufficiently low concentration to warn workers of potential overexposure. These contaminants are carbon dioxide, carbon monoxide, chlorine dioxide and sodium hydroxide.

The following table summarizes those contaminants which can be detected via odour or irritation prior to overexposure.

Sensory Indicator

Contaminant	Odour	Irritation
acrolein	✓	✓
chlorine	✓	
hydrogen sulphide	✓	
methanol	✓	
methyl mercaptan	✓	
muriatic acid (hydrochloric acid)	✓	✓
styrene	✓	
sulphur dioxide	✓	
suphuric acid	✓	

Data was presented in tabular format relating the selected mill contaminants to their sensory parameters, regulatory limits and hazard factors. Some methods of odour control were also identified.

SENSORY PARAMETERS AS INDICATORS OF OVEREXPOSURE

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