Government of Western Australia Department of Mines, Industry Regulation and Safety <u>Resources Safety</u>

Health and hygiene management – understanding your responsibilities and regulatory requirements

A review of the data submitted to the Department of Mines, Industry Regulation and Safety since health and hygiene sample reporting moved online has identified a significant number of reported exposure standard exceedances.

This information sheet highlights the responsibilities of appointed persons under the *Mines Safety and Inspection Act 1994* (MSIA) and Mines Safety and Inspection Regulations 1995 (MSIR) to reduce the risk of employees being exposed to hazards that may negatively affect their health. Principal employers, contractor employers, registered managers and ventilation officers are the target audience for this information.

Table 1 lists specific regulatory responsibilities relevant to managing health and hygiene hazards at Western Australian mining operations.

Table 1 Regulated responsibilities for management of health and hygiene hazards

Features	Reference	Specific regulatory responsibilities
General duty of care	MSIA	Duties of employers [s. 9] and employees [s. 10] Duty to report some occurrences and situations [s. 11] Duties of employers and self-employed persons [s. 12] Duties of plant designers etc. [s. 14]
Surveillance for health impacts (e.g. occupational hearing loss, asthma, pneumoconiosis, lead poisoning, dermatitis, silicosis)	MSIR Part 3, Division 4 Health surveillance	Health surveillance [r. 3.27] Biological monitoring [r. 3.28] Inform employee and employer of results [r. 3.31] Notice of occupational disease [r. 3.39] Remedial action [r. 3.40]
General duties associated with plant safety that may emit noise and atmospheric contaminants	MSIR Part 6 Plant safety	Assess risks [rr. 6.3 and 6.17] Reduce risks [rr. 6.4 and 6.18] Provide information for installation and maintenance [r. 6.20] Prevent unsafe use [r. 6.21] Damaged plant [r. 6.22] Modification of plant [r. 6.23]
Noise control	MSIR Part 7, Division 1 Occupational health	Noise measurements [rr. 7.1–7.11] Reduction of noise [r. 7.5] Personal hearing protectors [r. 7.6]
	Management of noise in Western Australian mining operations – guideline	Personal noise exposure assessments – Appendix 9
Safe use of hazardous substances and chemicals	MSIR Part 7, Division 3 Hazardous substances	Risk assessment [r. 7.27] Control risks [r. 7.28] Health surveillance [r. 7.30]

Features	Reference	Specific regulatory responsibilities
Control of dust and atmospheric contaminants	MSIR Part 9 Ventilation and control of dust and atmospheric contaminants	Ventilation officer appointment [MSIA s. 44] Ventilation officer [rr. 9.3–9.7]
		Defects rectified as soon as practicable [r. 9.8]
		Exposure standards [r. 9.11]
		Control of emissions and exposure [r. 9.12]
		Exposure sampling and monitoring [r. 9.13]

Health and hygiene management process

A health and hygiene management plan (HHMP) provides a structured means of creating a register of chemical, biological, ergonomic and physical hazards. It documents the hazards present at the mine site, assesses the risks that the hazards present, outlines the controls used, and details the verification and validation methods used to confirm the effectiveness of those controls.

HHMPs complement other management plans, registers and reports that are currently submitted to the Department. They are site-specific and detail what, when and how monitoring will be undertaken.

The diagram below illustrates the process with examples of common mining health hazards.

Health and hygiene hazard identification	 Noise and vibration Atmospheric contaminants (e.g. heavy metals, asbestos, particulates, fumes, gas) Hazardous substances and radiation (e.g. metals, solvents, fuels, fumes) Hazardous manual tasks Biological hazards (e.g. legionellae, mosquito-borne diseases) 			
Exposure assessment	 Noise reports (at commissioning and 5 yearly) Baseline exposure assessment (at commissioning, annual and 5 yearly review) Annual review of similar exposure group (SEG) data Review musculoskeletal injury data and manual task assessments 			
Risk control	 Control action plans – risk reduction Control monitoring – validation of control effectiveness 			
Risk-based health surveillance	 Hearing conservation program Respiratory protection program Biological monitoring program Heat stress monitoring 			
Regulatory reporting	 Submission of management plans and exposure monitoring Submission of exceedance investigations and remedial action plans Notification of incidence of occupational disease and significant hearing threshold shifts 			