



SAFETY BULLETIN

Use of Operator/Passenger Restraint and Protection Devices

INCIDENTS

An unacceptable number of incidents have raised concerns regarding the safe use of mobile equipment in the workplace. Workplace injuries result from:

- **people not wearing seatbelts**
- **insufficient guarding and**
- **improper cabin protection**

Investigations have shown the lack of fit-for-purpose mobile equipment, poor workplace practices and inappropriate management systems are contributing to incidents. Management systems for personnel protection require an understanding of the *Occupational Health and Safety Act 2000*, *Occupational Health and Safety Regulations 2001* and *Australian Standards*. Use of mobile equipment must include risk management, consultation, training and conformance to community standards.

OCCUPATIONAL HEALTH AND SAFETY

Industry is reminded of its obligations under the *Occupational Health and Safety Act 2000* (OHS Act). Under the provision of Section 8 employers have a duty to provide a safe workplace and ensure the health, safety and welfare of employees. Section 11 places duties on designers, manufacturers and suppliers of plant to ensure the plant is safe and without risk to health when properly used. Section 13 requires employers to consult with employees when making decisions which affect their health, safety and welfare.

To fulfil the above, assistance is available in the *Occupational Health and Safety Regulation 2001*. Chapter 2 of the Regulation includes a number of clauses relating to the employer's obligations with respect to risk management, while Chapter 5 deals with obligations with respect to plant. In particular, with respect to operator/passenger protection and restraint:

- **Clause 93** requires designers of powered mobile plant to ensure the plant is designed to minimise the risk of unintended overturning or a falling object coming into contact with the operator, and to ensure that mobile plant is designed to incorporate an appropriate combination of operator protective devices if there is a risk of the plant overturning, objects falling on the operator or the operator being ejected.

- **Clause 141(1)** requires employers to ensure that powered mobile plant is used so as to minimise the risk of overturning or a falling object coming into contact with the operator
- **Clause 141(2)** requires employers to ensure that an appropriate combination of operator protective devices are provided, used and maintained if there is a risk of the powered mobile plant overturning, or an object falling on the operator, or an operator being ejected from the seat.
- **Clause 141(9)** requires the employer to ensure powered mobile plant is fitted with appropriate seat restraints if the plant is fitted with operator protective structure.
- **Clause 141(10)(b)** requires an employer to ensure that powered mobile plant is not used to carry, lift or lower a passenger unless designed to carry the person, the person is seated in the seat, the seat is fitted with a restraint and the seat is located in a zone of protection afforded by the operator protective devices.

For more information on the OHS Act, Regulation and Codes of Practice visit the NSW DPI Minerals website www.minerals.nsw.gov.au/safety and follow the link to 'Safety Legislation'.

ADVICE TO INDUSTRY

Mines should note that, with mobile equipment, the employer is obligated to provide a workplace which is safe and without risks to health. The operator and passenger compartment within mobile machinery must meet these criteria and cater for foreseeable events. Where personnel use mobile equipment the employer is obligated to review and, where necessary, implement new or amended health, safety and welfare measures. This includes the application of *Australian Standards* for the appropriate overhead protection, for safe guarding of personnel, and safe restraint of personnel.

The following standards are available as basic guidance:

- **Mechanical Design Guideline (MDG) 15** - Guideline for Mobile and Transportable Equipment for Use in Mines
- **Australian Standard (AS) 4024.1** - Safe guarding of machinery
- **MDG 17 Appendix I** - Guidelines for the Construction of Continuous Miner Protective Canopies. This guideline provides some guidance for continuous miners and roadheaders in underground coal
- **AS 2294** - Earth-moving machinery – Protective structures

It is noted that as there is no specific category in Australian Standards for underground mobile equipment, hence it is required to be risk managed for the appropriate protection.

- **AS1636** - Tractors, roll over protective structures – Criteria and tests
- **AS 2664** - Earth-moving machinery – Seat belts and seat belt anchorages
- **AS 4987** - Earth-moving machinery – Tip-over protection structure (TOPS) for compact excavators – laboratory tests and performance requirements
- **AS4988** - Earth-moving machinery – Hydraulic excavators – Laboratory tests and performance requirements for operator protective guards

Note: MDG refers to a Mining Design Guideline, a series of guidance documents published and marketed by the Department of Primary Industries – Mine Safety Operations. AS refers to Australian Standards published and marketed by Standards Australia.

RECOMMENDATIONS

As a matter of priority, all mine sites should ensure appropriate seatbelts or restraints are fitted, correct guarding to protect personnel is fitted and appropriate overhead protection is fitted depending on the assessed operational risks. Employers and suppliers should ensure they are aware of their obligations under the OHS Act with respect to supplying equipment and the safe use of that equipment on mine sites.

Signed



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