

GUIDELINE

General duty of care in Western Australian mines

Second edition



Government of Western Australia
Department of Mines and Petroleum
Resources Safety

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Guidelines

A guideline is an explanatory document that provides more information on the requirements of legislation, details good practice, and may explain means of compliance with standards prescribed in the legislation. The government, unions or employer groups may issue guidance material.

Compliance with guidelines is not mandatory but they could have legal standing if it were demonstrated that the guideline is the industry norm.

Who should use this guideline?

This guideline should be used by anyone engaged in mining operations in Western Australia. All parties have responsibilities for health and safety at work. This includes employers, employees and other workers, self-employed persons and others such as people who design and construct buildings or manufacture and supply plant or substances.

Foreword

This guideline is issued by Resources Safety under the *Mines Safety and Inspection Act 1994*, and has been endorsed by the Mining Industry Advisory Committee.

The Act

The *Mines Safety and Inspection Act 1994* (the Act) sets objectives to promote and improve occupational safety and health standards within the minerals industry.

The Act sets out broad duties, and is supported by regulations, together with codes of practice and guidelines.

Regulations

The Mines Safety and Inspection Regulations 1995 (the regulations) provide more specific requirements for a range of activities. Like the Act, regulations are enforceable and breaches may result in prosecution, fines, or directions to cease operations and undertake remedial action.

Application

The provisions of this guideline apply to all mines as defined in section 4(1) of the Act.

1 Introduction

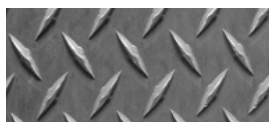
The purpose of this guideline is to provide guidance on the 'general duty of care' provisions of the *Mines Safety and Inspection Act 1994*. The Act sets objectives to promote and improve occupational safety and health for people who work in mining operations in Western Australia. It imposes a general duty of care to maintain safe and healthy workplaces at mines, protect people at work from hazards and describes the conduct required of people responsible for safety and health. The guideline provides information on the general duty of care obligations of:

- employers;
- employees;
- contractors and their employees;
- labour hire agents and workers; and
- people involved in the design, supply, installation and maintenance of plant.

This guideline complements the Commission for Occupational Safety and Health's *Guidance Note — General Duty of Care in Western Australian Workplaces 2005* by providing information specifically related to the mining industry.

The information presented is based on the provisions of the *Mines Safety and Inspection Act 1994*. This guideline should be used and read in conjunction with the Act, the Mines Safety and Inspection Regulations 1995 and other guidance material issued by Resources Safety such as codes of practice, guidelines, safety bulletins and significant incident reports (see Chapter 11).

The specific legislative requirements of general duty of care in Western Australian mines are listed in Appendix 1. Appendix 2 defines the workplaces considered to be mines under the Act, and other terms used in this guideline.



2 General duty of care

2.1 Legislative background

The aim of the legislation is to:

- ensure each employer provides and maintains a safe workplace, so far as is practicable; and
- make each person who works at a mining operation in Western Australia responsible for his or her own safety, and for the safety of others who would be affected by his or her actions or inaction.

The Act outlines the obligations of each group, and provides penalties for any breach of those obligations. The focus is on the prevention of unsafe situations. There does not need to be an injury before enforcement action can be taken to have an unsafe situation fixed.

The Act provides a framework where the general duty of care is supported by consultation, cooperation, workplace standards and procedures to resolve issues. The general duty of care is the guiding principle for all other parts of the Act.

The Act is supported by regulations that describe some of the requirements that apply to specific work situations. While the regulations must be complied with, the overriding responsibility is to comply with the general duties in the Act.

2.2 Extent of the duty

The principle of having a duty of care applies to employers at all levels, including corporations, and all workers, including those who are self-employed, supervisors and managers. It is aimed at preventing anyone being killed, injured or contracting an illness because of work activities in the mining industry.



2.3 Level of care required

A person must take the amount of care a reasonable person would take. What is reasonable will vary according to the situation, but the following principles can be applied to determine whether a particular action is reasonable:

- the standard of care will rise with the seriousness of the injury or harm that could result;
- the greater the likelihood of injury, the greater the care that should be taken to avoid it; and
- the easier it is to avoid the injury, the more reasonable it is to expect that appropriate measures will be taken to ensure it does not happen.

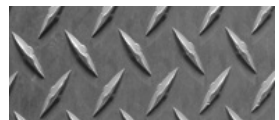
2.4 Gross negligence

The term “gross negligence” is defined in the Act to apply to certain breaches of the general duty of care. Gross negligence occurs if the offender knew his or her contravention of the Act was likely to cause death or serious harm to a person to whom a duty of care was owed, but the offender still acted or failed to act, in disregard of that likelihood, resulting in serious harm to the person.

2.5 Practicable

The term “practicable” as defined in the Act means reasonably practicable having regard to:

- the severity of any potential injury or harm to health;
- the degree of risk;
- the state of knowledge about
 - the injury or harm
 - the risk of that injury or harm occurring
 - the means of removing or mitigating the hazard; and
- the availability, suitability and cost of the means to remove or control the hazard.



3 Duty of care as an employer

3.1 An employer

An employer is anyone who employs a person at a mine. This may be under an employment contract, an apprenticeship or a traineeship scheme. The principal employer — that is, the person or company with overall control of the operations at the mine — must comply with all the employer’s duties relating to safety and health imposed by the Act. This is so whether the principal employer is based in Western Australia or elsewhere, and whether or not they have appointed a manager for the mine.

The duty of an employer who is not the principal employer only extends to matters that he or she controls, or would control if not for an agreement with the principal employer removing control.

3.2 General duty of care

Employers are required to provide and maintain a working environment where, so far as is practicable, employees are not exposed to hazards.

“Working environment” is not defined by the Act, but a “workplace” for a mine is defined to include anywhere that employees or self-employed persons are likely to be in the course of their work. It includes vehicles, buildings and other structures, but does not include catering, residential or recreational facilities unless a person is employed to service and maintain those facilities.

A hazard is anything that can cause injury or harm the health of a person.

3.3 Specific duties

Employers also have specific duties relating to the general duty to ensure that employees are not exposed to hazards at work.

Information on managing occupational safety and health using a risk management approach can be found in Australian Standard AS/NZS ISO31000:2009 *Risk management – principles and guidelines* and the National Mineral Industry Safety and Health Assessment Guideline, last updated in June 2007 and available from the Resources Safety website.

Appendix 3 lists some of the issues associated with hazard identification, risk assessment and risk control.

Note: Risk management should be an integral part of the management process at the mining operation, and not something that is only applied to occupational safety and health.

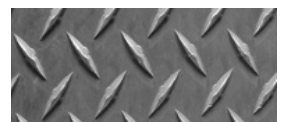
Safe workplace, plant and system of work

Employers must provide and maintain safe workplaces, plant and systems of work at mine sites. The emphasis is on the coordination of all work activity so that one part does not endanger a person who is working on another part of the work or at another job. The system of work should take into account factors such as:

- layout of the workplace;
- storage and handling of all materials and substances; and
- location of all people on the site.

The matters below should be considered as part of an integrated and safe system of work.

- All aspects of the work must be effectively planned, from the physical process to the individual tasks carried out by employees. Both direct and indirect impacts on safety and health of each task or process should be considered at the planning level. This would include issues such as fatigue and psychological stress.
- Equipment and appliances should be appropriate for the job. Equipment may be hazardous if it is too small, not strong enough for the task, or awkward to handle. Everyone associated with the task needs to know about the equipment to be used, as well as the task itself.
- Employees must have appropriate information, instructions, training and supervision.
- Employers should ensure procedures are in place to identify and prevent hazards, as well as to deal with any unforeseen hazards that may occur. Warning devices, emergency stop buttons and evacuation plans are some of the measures that can be taken.



Consultation and cooperation

One of the objectives of the Act is to foster cooperation and consultation between employers and employees. These are essential to providing and maintaining a safe and healthy workplace. Employer and employee involvement in identifying hazards and assessing and controlling risks contributes to employees' commitment and sense of ownership of the process and any change that results.

Employers must consult and cooperate on occupational safety and health matters with:

- safety and health representatives, where they exist at a mine; and
- other employees.

To enable effective consultation, policies and procedures should be developed for:

- hazard identification, mitigation and prevention; and
- consultative mechanisms.

Information, instructions, training and supervision

Employers are required to provide sufficient information, instructions, training and supervision to employees to enable them to perform their work safely. The Act aims to ensure that all people working at a mine are fully equipped to carry out the work required of them in a manner which will not expose them to hazards.

The information, instructions and training should be communicated in a way that employees can understand. Excluding those employees in positions of responsibility or working underground, for which English language competency is a legislated prerequisite, employers may need to take account of the background of particular employees, including situations where an employee does not understand much English, or cannot read. Checks should be made to ensure that all information, instructions and training are understood.

Information

Basic information that does not change frequently is probably best communicated in writing, such as through signs, posters, brochures or other forms of written material. Written information may cover subjects such as warnings about potential hazards, information about safe work practices or information about the safe operation of plant.

However, information does not have to be written, and electronic and other presentation media may be more appropriate.

Particular attention should be paid to information that changes with time, such as the mine plan, or relates to rapidly changing operational matters, such as ground conditions. A system needs to be maintained that distinguishes the latest update from superseded information.

A briefing or handover at the beginning of each shift is a useful way of transferring safety information from person to person, and crew to crew.

The Act also requires an employer to provide information to safety and health representatives about:

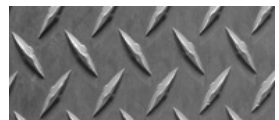
- possible hazards at the mine;
- hazards associated with plant or substances; and
- information about employee safety and health.

The manager and employer must consult with safety and health representatives where planned changes in the work environment may reasonably be expected to affect the safety or health of employees.

The employer should ensure that procedures are in place for safety and health representative to pass on relevant safety and health information to other employees.

Instructions

Instructions on procedures for safe working practices or safe plant operation are a subset of the information employers must provide to employees. Instructions may also relate to a particular task and, in that case, should clearly communicate what the employee must or must not do.



Training

The general duty requires training to be provided by an employer, but does not prescribe a particular form of training. Training should be relevant to the safety and health of employees at the mine, and should take account of the specific tasks of each employee.

There is also a regulatory requirement that, before commencing work at a mining operation, employees:

- be given adequate instruction and training; and
- assessed as competent.

External training courses have been established to provide a service to some industries and some of these courses have been accredited through national and state bodies. Both accredited and non-accredited training courses may be used.

Employers may also provide in-house training using their own employees as trainers, or using specialist trainers. In-house training may provide an opportunity for management and appropriate employees to share the delivery. Induction training for new employees is an example of safety and health training that is commonly set up as in-house training.

Supervision

Employers must provide adequate supervision to ensure that employees can work without being exposed to hazards. Adequate supervision means that:

- supervisors have relevant skills, knowledge and authority to carry out their role; and
- monitoring is sufficient to ensure:
 - safe work practices are followed; and
 - personal protective equipment is used and kept in reasonable condition.

Any unsafe behaviour that is discovered by a supervisor must be rectified immediately.

Employees who work alone or in isolated areas, such as employees in underground workplaces, or exploration geologists and surveyors, may require specialised communication systems to allow adequate supervision.

Provision of personal protective clothing and equipment

In some work situations it may not be possible to avoid certain hazards. Employers must protect employees by providing adequate personal protective clothing and equipment. Personal protective equipment should not be viewed as the only method of protection against hazards. Engineering control measures and limiting exposure to hazards should be considered and implemented where possible prior to considering protective clothing and equipment.

The employer must provide, and replace where necessary, all personal protective clothing and equipment, free of charge to the employee.

Protective clothing and equipment includes safety goggles, steel-toed boots and safety helmets where appropriate. Protection may also include items such as long-sleeved shirts, long trousers, hats and sunglasses to protect against damage from the sun.

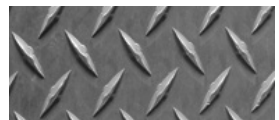
The employer must ensure that employees:

- are properly instructed on how to use personal protective clothing or equipment;
- wear personal protective clothing or use protective equipment where necessary or where directed to do so; and
- use personal protective clothing or equipment correctly.

Protective clothing should take into account the needs of particular employees. For example, if a worker needs to work using a respirator, the respirator must fit properly over the nose and mouth so that a good seal is made, ensuring all contaminants are drawn through the filters. Employers should provide different types of respirators to ensure that the individual needs of employees are met and the necessary protection against contaminants that may be present is provided.

Employers must also ensure that the protective clothing and equipment supplied:

- conforms to any applicable Australian Standard;
- is properly maintained and discarded on its use-by date; and
- is replaced if it becomes defective.



Safe plant and substances

The employer must ensure that the use, handling, storage, cleaning, maintenance, transportation and disposal of plant and substances at the mine are carried out in ways that ensure employees are not exposed to hazards. Work processes should be planned carefully and thoroughly, and procedures put in place so that no-one is exposed to hazards.

Plant

'Plant' has a broad meaning under the Act. It ranges from heavy machinery such as cranes, forklifts, trucks, railway carriages and vehicles, through to equipment such as gas bottles, electrical tools, robotic arms and hand-held tools.

Employers must ensure that a system is in place to identify hazards associated with plant and assess the risks of an employee being exposed to those hazards. All practical measures must be taken to reduce the risks and ensure a safe working environment in relation to plant.

To ensure a safe working environment in relation to plant the employer must ensure that:

- all relevant safety and health information is provided to contractors engaged to design plant;
- installation, testing and maintenance of plant is carried out competently, taking into account any hazards associated with particular plant, or the interaction of that plant with other elements of the work environment;
- plant is only used for its intended purpose;
- measures are in place to prevent unauthorised interference with plant;
- plant is stopped where practicable for maintenance or cleaning, or, if not practicable, operational controls that permit controlled movement of plant are in place;
- all repairs are carried out by a competent person in compliance with original design;
- plant is reassessed for hazards after alterations;
- dismantling, storing and disposal of plant is carried out by a competent person who has been provided with all the relevant information about the plant; and



- records of tests, maintenance inspections, commissioning or alteration of plant are kept and maintained during the operational life of the plant.

Hazardous substances

A hazardous substance is one that may harm a person exposed to it. Special provisions regarding hazardous substances are contained in the regulations as follows:

- a register must be kept and maintained of all hazardous substances used or produced at a mine;
- a risk assessment of the consequences of exposure to hazardous substances must be made for each substance, and procedures put in place to reduce the risk of employees being exposed to that substance;
- hazardous substances should be kept in appropriate containers and the containers should be clearly labelled; and
- a safe method of disposing of containers that held hazardous substances must be devised.

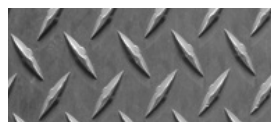
Material safety data sheets (MSDS) must be available for each hazardous substance used or produced at a mine, and these must be readily accessible to all employees potentially at risk from the substance.

Reporting and monitoring

The Act sets out a number of specific duties relating to the reporting and monitoring of the safety and health of employees. There are specific reporting requirements for:

- accidents involving injuries to people;
- certain types of occurrences or incidents, including those potentially serious incidents that, in the manager's opinion, could have caused serious injury or harm to health (i.e. near misses); and
- incidents involving registered plant.

The Act also requires employers to establish and maintain a system for the surveillance of the occupational health of their employees. As well as monitoring and reporting requirements relating to noise, fibres, dusts and silica (respirable quartz), additional surveillance is required when workers are exposed to other occupational health hazards.



Keeping mine entry and exit safe

The principal employer and mine manager — those people who have the management or control of the mine — must ensure that, as far as is practicable, people who are using the mine or who are using the means of access to and egress from the mine are not exposed to hazards.

This duty is to everyone entering or leaving the mine or parts of the mine, whether or not they are employees.

Employees and contractors should notify the principal employer or mine manager if they become aware of a hazard affecting access to or from the mine or parts of the mine.

This means action must be taken quickly to make access safe if there is a blockage at or near a mine portal, in a decline or near an escape shaft, such as that caused by disabled plant, rock fall or unstable ground.

Similarly, access roads to opencut mines must be kept clear and safe.

Safe entry and exit from a mine is always important, and particularly so if emergency evacuation is required.



4 Duty of care as an employee

4.1 An employee

The employee's duty to take reasonable care extends to everyone who works at a mine, be it under a contract of employment, an apprenticeship or a traineeship scheme. This means the duty applies to all employees, from production worker to senior executive.

4.2 General duty of care

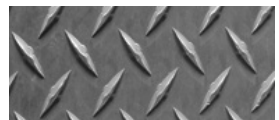
All employees have a general duty of care to ensure their own safety and health at work. They also have a general duty of care towards others, to ensure their actions or inaction do not put others' safety or health at risk. This duty of care applies to anyone who can reasonably be foreseen as likely to be injured, harmed or killed by an act or omission. Employees must not only work with their own safety in mind, but also ensure that their actions do not affect the safety of others.

The employee's duty to avoid causing harm to others may place greater responsibilities on managers and supervisors. For managers and supervisors, the range of people who may be affected by their decisions on safety and health matters could be quite extensive.

4.3 Specific duties

Employees also have specific duties. They must:

- reasonably comply with the employer's instructions about safety and health at the mine;
- use personal protective clothing and equipment that has been provided by the employer as instructed by the employer;
- take good care of equipment provided in the interests of safety or health. In particular, employees must not misuse or damage the equipment. It would be an offence, for example, to remove guards from machinery without proper authorisation. This applies where the employers have provided the necessary information, instruction and training in safety and health matters, and the employee's actions to misuse or damage are deliberate;



- at the end of an underground shift, report on the state of the workplace where they have been working to their immediate superior and person relieving them, where practicable; and
- cooperate with employers and managers on safety and health matters.

Employee participation is important in creating and maintaining a safe and healthy workplace. Employees have first hand knowledge of the risks associated with their work, and should be able to assist with identifying hazards and assessing and controlling risks.

4.4 Reporting

Serious occurrence or hazard

Anyone working at a mine must immediately report to their supervisor:

- any potentially serious occurrence that arises in connection with their work; and
- any situation in the mine that they believe could be a hazard to any person.

This includes reporting potential hazards and near misses as well as actual occurrences.

The supervisor must immediately advise the manager, or delegate of the manager, of this report. If the person does not have a supervisor, then he or she must report directly to the mine manager.

Injury

Every person working at a mine is required to report immediately to the mine manager any injury or harm suffered by any other person at the mine, unless he or she knows that someone has already reported the injury. Workers have a responsibility to look after their workmates, and to make sure that any injuries are reported so that something can be done to ensure they don't happen again.



Manager's duty after receiving report

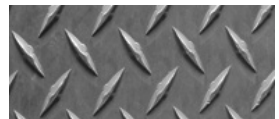
Within a reasonable time of receiving a report, the manager must:

- investigate the situation that was reported;
- decide whether any action needs to be taken; and
- notify the person who made the report of their decision.

5 Duty of care as a self-employed person

A self-employed person is anyone who is paid for work at a mine but is not under a contract of employment or is not an apprentice or trainee, whether or not that person is an employer.

A self-employed person working at a mine must take care to ensure his or her own safety and health at work.



6 Other duties as an employer or self-employed person

6.1 Specific duties

The duty of care of both employers and self-employed persons extends to non-employees such as visitors to the mine.

The employer or self-employed person must ensure, so far as is practicable, that no-one will be adversely affected by any of the work done at the mine, or hazards that may arise from it. This would be relevant, for example, where hazardous substances used at work have the potential to harm the members of an employee's family. Safety and health policies and procedures should ensure that employees are not transporting substances such as contaminated dust or fibres to their home on their work clothes, in vehicles or some other means.

6.2 Notification of hazard

Employers and self-employed persons working at a mine are required to report any situation that they believe to be hazardous to the principal employer or manager if:

- the principal employer or manager has a duty to remedy the hazard; and
- the principal employer or manager has not been notified of the hazard.

Notice should be given as soon as practicable after the employer or self-employed person becomes aware of the hazard.



7 Mining workplace arrangements that are treated as employment

7.1 Contractors

Where a principal engages a contractor to carry out work, the principal has the duty of care responsibilities of an employer towards the contractor, any employees of the contractor, or others engaged by the contractor. This applies as if the contractor and the employees were employees of the principal.

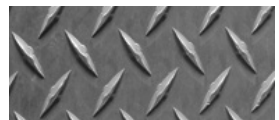
However, the principal's duty applies only in relation to matters over which the principal is able to exercise control. In other words, the main employer is responsible for the safety and health of everyone at the mine site over whom they have a level of control.

Contractors having their own employees will retain the duties of an employer towards their own employees. It is important to note that both the contractor and the principal have duties of care to the contractor's employees.

Contractors have both the duties of an employer in relation to their own employees, and the duties of an employee because they are working for the principal.

These obligations cannot be avoided by a contract between the principal and the contractor that purports to either:

- give control to a contractor or the contractor's employee for any matter that:
 - comes within the principal's duties under the Act; or
 - for which the principal can exercise control; or
- waive any of the contractor's rights under the Act.



7.2 Labour arrangements generally

The general rule where a person is employed to work at a mine but there is no employment contract between the worker and the employer is that:

- the employer still has the same duty of care towards the worker as if he or she was an ordinary employee; but the employer's duty of care only applies to matters that the employer has the capacity to control;
- the worker has the same duty of care as any other employee for his or her own and others' safety; and
- the statutory duties persist, despite any agreement to the contrary made between the employer and the worker.

7.3 Labour hire arrangements

Labour hire

Labour hire refers to the arrangement where the principal employer (the client) engages workers from an organisation that specialises in providing labour (the labour hire agency or agent).

The arrangement is characterised by:

- an agreement for remuneration between the client and the agent regarding the supply of a worker to carry out work for the client;
- an agreement that may be a contract of employment between the agent and the worker to carry out work for the client; and
- no contract of employment between the client and the worker.

An agent is a person who conducts a business that provides workers (employees or contractors) to carry out work for another employer. This includes a group-training organisation as defined in section 7(1) of the *Industrial Relations Act 1979*.

Workers are usually employed and paid by a labour hire agency or agent and required to perform their tasks for a client, usually under the client's direction.



General duty

There is sometimes a misunderstanding that engaging a worker through a labour hire agent involves fewer safety and health obligations. However, both the agent and the client have the same general duties of care as those applicable to an employer in areas that each has the capacity to control.

Under contract labour arrangements where a labour hire organisation provides workers to work at a mine, the client is deemed to be the employer in matters over which it has control.

Responsibility for safety

Both the client and the agent in charge of the labour hire organisation are required to provide and maintain a mine working environment where employees are not exposed to hazards.

This includes providing and maintaining safe workplaces, plant and systems of work at mine sites, as well as information, instructions, training and supervision so that employees can work without being exposed to hazards.

Necessary personal protective clothing and equipment must be provided at no cost to labour hire workers. The provision of such clothing and equipment is an issue that needs to be agreed upon by the agent and client before the work commences.

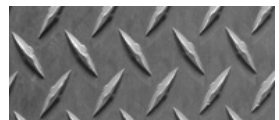
The use, cleaning, maintenance, transportation and disposal of plant and substances must also be carried out in ways that ensure employees are not exposed to hazards.

Agent's responsibilities

Although the agent may not have day-to-day control of the work at the client's mine site, the agent's responsibilities do not stop simply because the work is not carried out at his or her own workplace.

The agent should:

- verify and match the training, skills and experience of the worker to the needs of the task;
- provide general induction and arrange specific induction relevant to the task and the plant to be used at the client's mine site;



- provide information and training to ensure workers know how to safely carry out their activities;
- take reasonable steps to verify that:
 - any change of duties does not present a hazard to the worker;
 - the work environment is safe, including plant and equipment, systems of work and other matters under the control of the client;
 - adequate on-site supervision is provided; and
 - the work of the client's employees does not harm the safety and health of the labour hire worker.

Client's responsibilities

The client usually has day-to-day control of the labour hire worker, so the client should:

- ensure the work environment is safe, including plant and equipment, systems of work and other matters under the client's control;
- provide specific induction for the tasks to be undertaken and the plant to be used;
- notify the agent if any change of duties is being considered;
- provide information and training to ensure workers know how to safely carry out their activities;
- provide adequate onsite supervision;
- ensure the work of employees does not harm the safety and health of the labour hire workers; and
- report notifiable incidents, injuries and diseases to Resources Safety.

Joint responsibilities

The agent and client should consult and take some actions jointly, including:

- identifying hazards in relation to the task and assessing the associated risk prior to placement of a worker;
- understanding the obligations of how to deal with hazards;
- considering and implementing control measures to ensure a safe environment;



- ensuring personal protective equipment is provided at no cost to the worker; and
- providing on-site training and induction.

Worker's responsibilities

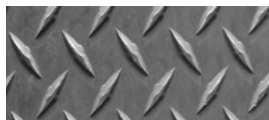
A worker in a labour hire arrangement has the same general duties of care as those of an employee.

Workers must take reasonable care of their own safety and health, and that of others at the mine site.

8 Duties of corporations as employers for mining workplace arrangements that are treated as employment

Employers' duties for workplace arrangements that are treated as employment are also applicable to corporations. In addition to the employers' duties outlined above, corporations must ensure, so far as is practicable, that:

- no workers on the mine suffer adverse effects to their safety or health; and
- no hazard arises because of:
 - work carried out by the corporation;
 - work being carried out under the direction of the corporation; or
 - the system of work used by the corporation.



9 Duties of employers for employer-provided accommodation

9.1 Employer-provided accommodation

Many mine sites in Western Australia are in remote areas a long way from townsites. Because of the distance involved and the amount of time that would otherwise be spent travelling to and from work, mine site employers may provide their workers with somewhere to live.

While employees have a duty of care to ensure their own safety and health at the premises provided, the employer must maintain the premises so the occupants are not exposed to hazards.

This obligation under the *Mines Safety and Inspection Act 1994* applies in relation to premises where the residence is owned or controlled by the employer, is outside the metropolitan area or a gazetted townsite, and workers must live there because no other accommodation is reasonably available in the area.

The obligation does not apply where there is a tenancy agreement or lease arrangement. In these cases, the *Residential Tenancies Act 1987* usually applies.

Workers living in employer-provided accommodation should treat it with the same level of care that they would take in their own homes. At the same time, they should bring to their employer's attention any issues relating to safety and health, in the same way they would notify an owner of problems if they were leasing a domestic property.

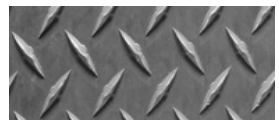
9.2 Employer's obligations

Employers providing residential accommodation need to ensure that:

- the building is in good repair and separated from noise, heat, dirt and atmospheric contaminants;
- electrical outlets are safe to use and protected by residual current devices where necessary;



- precautions are in place to prevent fires, and fire alarms and portable fire extinguishers are provided and regularly maintained;
- people can enter and exit safely, particularly in an emergency;
- there is an emergency evacuation plan in place and residents are familiar with it;
- there are adequate facilities for showering, hand washing and laundering, along with an adequate number of toilets;
- water is available at a location separate from the toilet area;
- cooking and refrigeration facilities are adequate and safe to use;
- if appropriate, hygienic areas are provided for preparing and eating meals;
- the building is regularly cleaned;
- sleeping furniture and fittings are structurally sound and well maintained;
- occupants are protected from extremes of heat and cold; and
- there is adequate ventilation and lighting.



10 Duties of designers, manufacturers, importers and suppliers

10.1 General duty

Designers, manufacturers, importers and suppliers must ensure that the design and construction of any plant in a mine is, as far as is practicable, safe to install and use.

To ensure the safety of any person who installs or operates the plant the designer, manufacturer, importer and supplier must:

- reduce or prevent the possibility of exposing any person to hazards by:
 - identifying any hazards associated with the plant;
 - assessing the risk of exposure of any person to that hazard; and
 - considering possible means of reducing the risk of exposure;
- test and study the plant to ensure that its design and construction are safe;
- provide information as to the intended use and other safety information when the plant is supplied, and subsequently whenever requested. This should include information relating to:
 - the purpose for which the plant is designed;
 - any dangers associated with the plant;
 - plant specifications including evaluative test data;
 - tests and inspections to be performed;
 - installation, commissioning, operation, maintenance, cleaning, transport, storage and, where appropriate, dismantling of plant;
 - systems of work necessary for the safe use of the plant;
 - knowledge, training or skill necessary for persons inspecting and testing the plant; and
 - emergency procedures relating to the plant.



10.2 Plant hire

A supplier under a hire or lease agreement must:

- inspect the plant between hirings or leaseings to reduce the risk of hazards;
- assess the need to test plant for hazards and determine the frequency of testing; and
- ensure that testing is carried out and the results recorded for the operating life of the plant.

10.3 Installation

Anyone who erects or installs any plant at a mine must ensure they do so in such a way that people who use the plant properly will not be exposed to hazards. They must:

- identify any hazards associated with the installation or erection of the plant;
- assess the risk of exposure of any person to that hazard; and
- consider possible means of reducing the risk of exposure.

10.4 Design and construction of building or structure

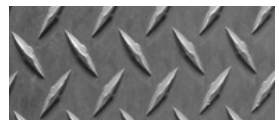
A person who designs or constructs any building or structure on a mine, including a temporary structure, must ensure that it is safe for anyone who:

- is involved in the construction, maintenance, repair or service of the structure; and
- properly uses the building or structure.

10.5 Substances at mines

Manufacturers, importers or suppliers of substances to a mine must provide information for employers and employees about injury or harm to their health that could result from the use of these substances.

The information must be provided when the substance is supplied and subsequently upon request. It should cover the safe use, handling, processing, storage, transportation and disposal of the substance.



11 Further information

COMMISSION FOR OCCUPATIONAL SAFETY AND HEALTH, 2005, Guidance note — general duty of care in Western Australian workplaces: COSH, Western Australia, 81 pp.

COMMISSION FOR OCCUPATIONAL SAFETY AND HEALTH, 2006, Code of practice — working hours 2006: COSH, Western Australia, 36 pp.

COMMISSION FOR OCCUPATIONAL SAFETY AND HEALTH AND MINING INDUSTRY ADVISORY COMMITTEE, 2009, Code of practice – safeguarding of machinery and plant 2009: COSH and MIAC, 68 pp.

COMMISSION FOR OCCUPATIONAL SAFETY AND HEALTH AND MINING INDUSTRY ADVISORY COMMITTEE, 2010, Code of practice – prevention and control of Legionnaires' disease 2010: COSH and MIAC, 37 pp.

DEPARTMENT OF MINES AND PETROLEUM, 2006, Accident and incident reporting — guideline: Resources Safety, Department of Mines and Petroleum, Western Australia, 15 pp.

DEPARTMENT OF MINES AND PETROLEUM, 2007, Dealing with bullying at work — guideline: Resources Safety, Department of Mines and Petroleum, Western Australia, 11 pp.



DEPARTMENT OF MINES AND PETROLEUM, 2007, Prevention and management of violence, aggression and bullying at work – code of practice: Resources Safety, Department of Mines and Petroleum, Western Australia, 31 pp.

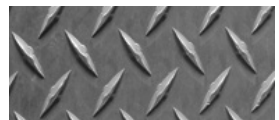
DEPARTMENT OF MINES AND PETROLEUM, 2008, Risk-based health surveillance and biological monitoring — guideline: Resources Safety, Department of Mines and Petroleum, Western Australia, 53 pp.

DEPARTMENT OF MINES AND PETROLEUM, 2009, Consultation at work – code of practice: Resources Safety, Department of Mines and Petroleum, Western Australia, 26 pp.

DEPARTMENT OF MINES AND PETROLEUM, 2010, Safe design of buildings and structures – code of practice: Resources Safety, Department of Mines and Petroleum, Western Australia, 25 pp.

Go to www.dmp.wa.gov.au/ResourcesSafety for further information on safety and health in the mining industry.

Go to www.commerce.wa.gov.au/WorkSafe for further information on occupational safety and health in general.





Appendix 1 – Legislative provisions

Listed below are the sections of the *Mines Safety and Inspection Act 1994* and Mines Safety and Inspection Regulations 1995 that are relevant to this guideline.

Note: The only authorised versions of the Act and regulations are those available from the State Law Publisher (www.slp.wa.gov.au), the official publisher of Western Australian legislation and statutory information.

General duty of care

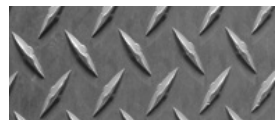
Mines Safety and Inspection Act 1994

- s. 4 Terms used in this Act
- s. 8A General and particular duties
- s. 8B Meaning of gross negligence in relation to certain breaches of this Part

Duty of care — employers

Mines Safety and Inspection Act 1994

- s. 4 Terms used in this Act
- s. 9 Duties of employers
- s. 9A Breaches of section 9(1)
- s. 11A Duty of manager to inform person who makes a report under section 11
- s. 13 Duties of principal employers and managers
- s. 13A Breaches of section 13



Employers' duties

Mines Safety and Inspection Act 1994

Employers and self-employed persons

- s. 12 Duties of employers and self-employed persons
- s. 12A Breaches of section 12
- s. 15F Notification of hazard to the principal employer and manager

Mines Safety and Inspection Regulations 1995

Protective clothing and equipment

- r. 4.1 Protective clothing and equipment

Plant

- r. 6.2 Plant to be maintained and operated in a safe manner
- r. 6.17 Employer to identify hazards associated with plant and to assess risks
- r. 6.18 Employer to reduce risks identified
- r. 6.19 Person to provide design information to design contractor
- r. 6.20 Employer's duties in relation to installation, maintenance, etc. of plant
- r. 6.21 Employer to prevent unsafe use of plant
- r. 6.22 Employer's duties when plant is damaged or repaired
- r. 6.23 Employer's duties when design of plant is altered
- r. 6.24 Employer's duties when dismantling, storing or disposing of plant

Hazardous substances

- r. 7.20 Terms used
- r. 7.21 Material Safety Data Sheets
- r. 7.22 Containers to be appropriate
- r. 7.23 Disposal of containers
- r. 7.24 Labels
- r. 7.25 Register of hazardous substances



Workplace arrangements treated as employment

Mines Safety and Inspection Act 1994

Contractors

s. 15A Contract work arrangements

Labour arrangements

s. 15B Labour arrangements in general

Labour hire arrangements

s. 15C Labour hire arrangements

Duties of a corporation

s. 12B Duties placed on corporation to which section 15A, 15B or 15C applies

s. 12C Breaches of section 12B

Residential accommodation — employer's duties

s. 15D Duty of employer in respect of certain residential accommodation

s. 15E Breaches of section 15D

Duties of designers, manufacturers, importers and suppliers

s. 14 Duties of manufacturers etc.

s. 15 Breaches of section 14

Mines Safety and Inspection Regulations 1995

Duties of designers, manufacturers, importers and suppliers

r. 6.3 Designer to identify hazards associated with plant and to assess risks

r. 6.4 Designer to reduce identified risk of exposure

r. 6.5 Designer to provide information

r. 6.6 Manufacturer to identify hazards and to assess and reduce risks if designer is outside jurisdiction

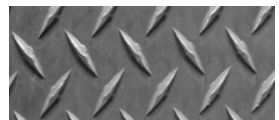
r. 6.7 Hazard identification during manufacturing process

r. 6.8 Manufacturer to reduce risk of exposure to identified hazards

r. 6.9 Importer to identify hazards and to assess and reduce risks if both designer and manufacturer are outside the jurisdiction

r. 6.10 Importer to reduce risk of exposure to hazards

r. 6.11 Importer to provide information as to intended use and other safety information



- r. 6.12 Supplier's duties
- r. 6.13 Supplier to provide safety information
- r. 6.14 Duties of person becoming supplier through hiring or leasing arrangement
- r. 6.15 Installer or erector to identify hazards associated with plant and to assess risks
- r. 6.16 Installer or erector to reduce risks identified

Duty of care — employees

Mines Safety and Inspection Act 1994

- s. 4 Terms used in this Act
- s. 10 Duties of employees
- s. 10A Breaches of section 10(1) or (3)
- s. 11 Reporting of dangerous situations or occurrences

General penalty provisions

Mines Safety and Inspection Act 1994

- s. 4A Penalty levels defined
- s. 4B Meaning of 'first offence' and 'subsequent offence'
- s. 94 General penalty
- s. 95 Continuing offences
- s. 99 Vicarious responsibility of employers, managers, and supervisors
- s. 99A Vicarious responsibility for offences involving gross negligence
- s. 100 Offences by corporations
- s. 100A Responsibility of officers of corporation for offences involving gross negligence
- s. 101A No double jeopardy

Mines Safety and Inspection Regulations 1995

- r. 17.1 General penalty



Appendix 2 – Definitions

Mines Safety and Inspection Act 1994

4. Terms used in this Act

(1) In this act, unless the contrary intention appears —

...**“employee”** means —

- (a) a person by whom work is done at a mine under a contract of employment; and
- (b) an apprentice or trainee who works at a mine;

...**“employer”** means —

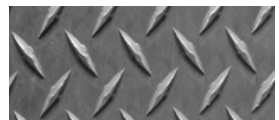
- (a) a person who employs an employee at a mine under a contract of employment; and
- (b) in relation to an apprentice, a person who employs the apprentice at a mine under a training contract registered under the *Vocational Education and Training Act 1996* Part 7 Division 2;

...**“exploration operations”** means any exploration activity which is undertaken on a mining tenement, whether offshore or on land, but does not include —

- (a) any development work involving underground operations; or
- (b) the excavation of any trial pits beyond the extent permitted under the tenement conditions; or
- (c) remote sensing activity carried out using airborne or satellite mounted equipment (except for ground based activity in support of such remote sensing activity);

...**“manager”** in relation to a mine, means the registered manager for the mine;

...**“mine”** means a place at which mining operations are carried on and, where mining operations are being carried on in conjunction with one another at 2 or more places, those places are to be taken to constitute one mine unless the State mining engineer notifies the principal employer in writing otherwise in accordance with subsection (3); and **“to mine”** includes to carry on any manner or method of mining operations;



...“**mining operations**” means any method of working by which the earth or any rock structure, coal seam, stone, fluid, or mineral bearing substance is disturbed, removed, washed, sifted, crushed, leached, roasted, floated, distilled, evaporated, smelted, refined, sintered, pelletized, or dealt with for the purpose of obtaining any mineral or rock from it for commercial purposes or for subsequent use in industry, whether it has been previously disturbed or not, and includes —

- (a) exploration operations; and
- (b) developmental and construction work associated with opening up or operating a mine; and
- (c) the removal and disposal of overburden or waste or residues by mechanical or other means and the stacking, depositing, storage, and treatment of any substance considered to contain any mineral; and
- (d) the operation of blast furnaces and direct reduction furnaces; and
- (e) the operation of privately owned railways to transport ore or other mining products, or to provide related services; and
- (ea) the transport of ore or other mining product that takes place on a road that is not a road as defined in the *Road Traffic Act 1974*; and
- (f) the crushing, screening, sorting, stacking, and loading and handling of ore or other mining products at any rail or road terminal or any loading or transhipment points, including seaports; and
- (g) the operation of any support facilities on the minesite, including mine administration offices, workshops, and services buildings; and
- (h) borefields remote from the minesite but an integral part of the mining operation; and
- (i) operations by means of which salt or other evaporites are harvested; and
- (j) operations by means of which any mineral is recovered from the sea or sea bed or a natural water supply; and
- (k) operation of residential facilities and recreational facilities and the ground used for that purpose, where such facilities are located on a mining tenement and are used solely in connection with mining operations; and



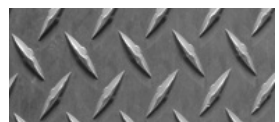
- (l) the operation of any project which is for the time being declared by the Governor to be a mining operation under section 6; and
- (m) operations undertaken for the environmental rehabilitation of the minesite during production operations and after their completion; and
- (n) operations for the care, security and maintenance of a mine and plant at the mine undertaken during any period when production or development operations at the mine are suspended; and
- (o) operations undertaken to leave a mine safe to be abandoned,

but does not include the operation of —

- (p) steel making plants; or
- (q) rolling mills; or
- (r) facilities for the manufacture of goods from mining products; or
- (s) residential facilities or recreational facilities and the ground used for the purpose where such facilities are not located on a mining tenement and directly associated with mining operations; or
- (t) sand, gravel, limestone, or rock excavation carried on by or for any State agency or instrumentality or any local government for the use or disposition by any such agency, instrumentality or local government; or
- (u) excavation activities on private land by and for the use of the owner of the land;...

...**“principal employer”** —

- (a) in relation to a mine (other than a mine where only exploration operations are being carried out), means the employer who is the proprietor, lessee, or occupier of the mine and who has overall control and supervision of the mine, mining operations at the mine and the manager of the mine; and
- (b) in relation to a mine where only exploration operations are being carried out, means the employer who has overall control and supervision of the exploration operations at the mine and the exploration manager appointed for those operations;



...**“self-employed person”** means an individual who works for gain or reward otherwise than —

(a) under a contract of employment; or

(b) as an apprentice,

whether or not the individual is an employer;

...**“workplace”** in relation to a mine, means a place, whether or not in a vehicle, building, or other structure, where employees or self-employed persons work or are likely to be in the course of their work, but does not include catering, residential, or recreational facilities for employees or self-employed persons except in the case of persons who are employed to service and maintain those facilities.

Note: The only authorised versions of the Act and regulations are those available from the State Law Publisher (www.slp.wa.gov.au), the official publisher of Western Australian legislation and statutory information.



Appendix 3 – Risk management

Under section 9(1)(a) of the Act, employers have a duty to ensure, as far as practicable, that employees are not exposed to hazards at the workplace.

To ensure a safe and healthy mine, the mine should be modified to suit people, not the other way around, by applying the hierarchy of control.

It may be useful to work through three basic steps for each activity or area:

- identify the hazards – recognise things that may cause injury or harm to the health of a person, such as flammable material, ignition sources or unguarded machinery;
- assess the risk – look at the possibility of injury or harm occurring to a person if exposed to the hazard; and
- address the risk – introduce measures to eliminate or reduce the risk of a person being exposed to the hazard.

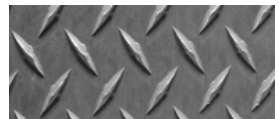
Consultation with safety and health representatives and workers, including contractors, is important, especially if there are changes in the work environment, new technology is introduced, or standards are changed.

Identifying the hazards

There are a number of ways to identify potential sources of injury or disease. Selection of the appropriate procedure will depend on the type of work processes and hazards involved.

Procedures may range from a simple checklist for a specific piece of equipment or substance to a more open-ended appraisal of a group of related work processes. A combination of methods may provide the most effective results. Methods of identifying workplace hazards include:

- developing a hazard checklist;
- conducting walk-through surveys;
- reviewing information from designers or manufacturers;
- analysing unsafe incident, accident and injury data;
- analysing work processes;
- consulting with employees;
- examining and considering material safety data sheets and product labels; and
- seeking advice from specialist practitioners and consultants.



Some hazards are inherent in the work process, such as mechanical hazards, noise, or the toxic properties of substances. Other hazards result from equipment failures and misuse, control or power system failures, chemical spills and structural failures, and can be anticipated during the hazard identification process.

Hazards may be grouped into three categories — physical, mental and biological. Within each category there are further hazard types. Table A3.1 lists some types of hazards with specific examples and is a useful starting point when identifying work-related hazards.

Table A3.1 — Some types and examples of hazards to be considered for mining operations

| Type of hazard | Specific examples |
|-------------------------|--|
| Gravity | Falling objects, falls of people |
| Kinetic energy | Projectiles, penetrating objects |
| Mechanical energy | Caught between, struck by, struck against |
| Hazardous substances | Skin contact, inhalation |
| Thermal energy | Spills and splashes of hot matter |
| Extremes of temperature | Effects of heat or cold |
| Radiation | Ultraviolet, arc flashes, microwaves, lasers |
| Noise | Hearing damage |
| Electrical | Shock, burns |
| Vibration | Affects hands and body |
| Biological | Micro-organisms |
| Stress | Unrealistic workload and expectations |



The conclusion of the first step of the risk assessment should result in a list of:

- hazard sources;
- the particular form in which the hazard occurs;
- the areas of the mine or work process where it occurs; and
- the people exposed to the hazard.

The most common hazards in terms of bodily injury or disease are those that result in:

- strain or overuse injuries and diseases such as to the back, shoulder and wrist;
- cuts and abrasions to the eyes, hands, fingers, feet and head;
- impact and crush injuries to the head, feet and fingers;
- burns (by heat, light or chemicals) to the eyes, feet, and skin;
- noise-induced hearing loss; and
- toxic effects (short or long term) to the respiratory system or skin, resulting in poisoning, cancers or dermatitis.

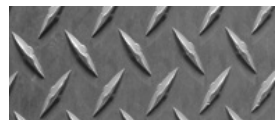
Analysing and assessing the risks

Risk assessment involves generating a list of the potential injury or harm arising from the hazards identified, and the likelihood of these occurring. In general, these should be listed in order from the most to the least serious, such as from death by crushing to abrasion. The potential for fatal injury should be considered for each hazard type identified.

In assessing risks, consideration should be given to the state of knowledge about the frequency of injury or disease, the duration of exposure to injury or disease sources and the likely severity of the outcomes. Knowledge gained from similar mines or similar processes may be relevant.

Items to be considered include:

- frequency of injury — how often is the hazard likely to result in an injury or disease?
- duration of exposure — how long is the employee exposed to the hazard?
- outcome — what are the consequences or potential severity of injury?



Assessing these factors indicates the probability of injury or harm to workers involved in a particular work process, and the likely severity of this harm. The task may be complicated by incomplete information regarding hazards of a particular work process. Risk assessment requires good judgement and awareness of the potential risks of a work process. Anyone undertaking the risk assessment must have knowledge and experience of the work process.

An assessment of the risk will help determine the consequences (potential injury or disease) and assist in identifying methods to reduce the risk.

Risk assessment should consider:

- the adequacy of training or knowledge required to work safely;
- the way the jobs are performed;
- the way work is organised;
- the size and layout of the workplace;
- the number and movement of people on the site;
- the type of operation to be performed;
- the type and safety features of machinery and plant in use;
- procedures for emergency evacuation;
- the storage and handling of materials and substances; and
- environmental factors.

Addressing the risk

Identifying control measures

The final step in risk control is determining the control measures that need to be taken. In some instances, a combination of control measures may be appropriate. The means of reducing risks can be grouped into the categories outlined below. Control measures should be designed to eliminate or reduce the risks associated with:

- hazardous work processes;
- the effects of injury or disease;
- exposure to hazardous substances; and
- plant, noise, and UV radiation.



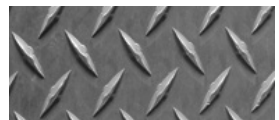
Hazard control

Hierarchy of control

There is a hierarchy of control measures that ranges from the most effective to the least effective. The hierarchy of control measures is:

- elimination — removing the hazard or hazardous work practice from the mine. This is the most effective control measure;
- substitution — substituting or replacing a hazard or hazardous work practice with a less hazardous one;
- isolation — isolating or separating the hazard or hazardous work practice from people not involved in the work. This can be done by marking off hazardous areas or installing screens or barriers;
- engineering control — if the hazard cannot be eliminated, substituted or isolated, an engineering control is the next preferred measure. This may include modifications to tools or equipment or providing guarding to machinery or equipment;
- administrative control — includes introducing work practices that reduce the risk. This could include limiting the amount of time a person is exposed to a particular hazard; and
- personal protective equipment — should be considered only when other control measures are not practicable.

Control measures are not mutually exclusive. That is, there may be circumstances where more than one control measure should be used to reduce exposure to hazards.



Preferred controls

The control of occupational injury and disease risks should preferably be dealt with by design, substitution, redesign, separation or administration. These controls generally eliminate, reduce or minimise risk in a more reliable manner than personal protective equipment.

Controls involve implementing measures that reduce the hazard and risk at a mine to levels that do not pose a risk to the health or safety of people working there.

Where regulations require specific methods to control risk, these must be complied with. Information or ideas on control measures can come from:

- codes of practice, guidelines and guidance notes;
- employees;
- industry or employer associations;
- unions;
- government bodies;
- specialist practitioners and consultants;
- Australian Standards;
- other relevant standards;
- other publications and reference databases;
- material safety data sheets (MSDS);
- manufacturers and suppliers; and
- designers, architects and engineers.

Control through personal protective equipment

Personal protective equipment alone should be used as a last resort, in circumstances where other methods of control are not practicable. The factors determining the appropriateness of using personal protective equipment include:

- the nature of the work or the work process concerned;
- the severity of any potential injury or disease;
- the state of knowledge about the injury or disease related to the work or process;
- information available to employers about methods of preventing injury or disease associated with a particular hazard or risk;
- the availability and suitability of methods to prevent, remove or mitigate causes of injuries or diseases associated with a hazard or risk; and



- whether the costs of preventing, removing or mitigating that injury or disease are prohibitive in the circumstances when measured against the overall result and cost of doing nothing.

There are some situations where temporary use of personal protective equipment may be necessary. These include:

- where it is not technically feasible to achieve adequate control of the hazard by other measures. In these cases, the hazard should be reduced as far as practicable by other measures and then, in addition, suitable personal protective equipment should be used to secure adequate control;
- where a new or revised risk assessment indicates that personal protective equipment is necessary to safeguard safety and health in the short term until such time as adequate control is achieved by other methods, such as where urgent action is required because of plant failure; and
- during routine maintenance operations. Although exposure to hazards occurs regularly during such work, the infrequency and small number of people involved may make other control measures impracticable.

Review of control measures

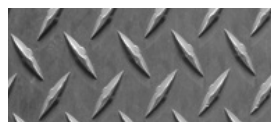
Regular and frequent review of control measures is important to ensure they continue to be relevant and prevent or control exposure to hazards or hazardous work practices.

Engineering controls should be regularly tested to ensure their effectiveness, and performance testing and evaluation standards should be established.

Repair and maintenance programs should specify:

- where servicing is required;
- the extent of servicing required;
- the nature of the servicing required;
- the frequency of servicing;
- who is responsible for repair and maintenance programs; and
- how defects will be corrected.

To ensure accurate record keeping, a recording or reporting system should be developed, implemented and maintained.





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Department of Mines and Petroleum
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