



**Mining & Quarrying**  
OCCUPATIONAL HEALTH &  
SAFETY COMMITTEE

# Hazard Identification and Risk Management Guide

Promoting Work, Health and Safety in the Workplace

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# Hazard Identification and Risk Management Guide

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## AIM

The aim of this guidance material is to provide mine and quarry operators with an understanding of the principles of risk management, the processes for identifying workplace hazards and controlling their associated risks.

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## 1. Introduction

A Hazard is anything that has the potential to cause harm. Hazards can be associated with (but not limited to) a task, process, animal, plant and equipment, site design, location or environmental conditions. The Risk is the potential outcome of being exposed to a hazard.

All activities conducted by an organisation have some level of risk attached. Understanding and treating that risk is the key to providing a healthy and safe workplace for you and your workers; however it does not happen by any one person alone!

We all have a responsibility and a part to play when it comes to the management of hazards and risks; this includes senior management, workers, contractors and visitors.

Under the South Australian Workplace Health and Safety Act and Regulations 2012, a PCBU must ensure adequate resources have been provided and implemented to identify and manage workplace hazards and risks.

## 2. Definitions

<b>Competent Person -</b>	A person who has acquired through training, qualification or experience, the knowledge and skills to carry out the task
<b>Hazard -</b>	Something that has the potential to cause harm (injury or damage)
<b>Hierarchy of Control -</b>	A list of control measures, in priority order, that are used to eliminate or minimise exposure to a hazard.
<b>Principle Mining Hazard -</b>	Mining operations that have a reasonable potential to result in multiple deaths in a single incident or a series of recurring incidents
<b>Risk -</b>	The combination of the consequences of an event and the associated likelihood of the event occurring.
<b>Risk Assessment -</b>	The process of evaluating the likelihood and severity of harm arising from the potential exposure to a hazard.
<b>Risk Control -</b>	The process of eliminating or minimising the risk of harm
<b>Risk Management Framework -</b>	set of components that provide the foundations and organizational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout an organization
<b>Risk Management Process -</b>	systematic application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context, and identifying, analyzing, evaluating, treating, monitoring and reviewing risk

## 3. Risk management framework

The framework for risk management consists of the following areas:

- An organisations mandate and commitment to risk management,
- Designing framework for risk management,
- The implementation of risk management, and
- Monitoring, reviewing and the continual improvement of the framework

To implement an effective risk management framework and process, an organisation must first gain a strong commitment from all levels of management. Management must have “buy in” to ensure the process will be managed according to organisations policy objectives’ and procedures.

Through consultation and communication on legislative and organizational requirements, you should first understand and determine what the organisations objectives are and define, develop and implement a risk management framework which will achieve those objectives and provide the foundations and measures to manage risk through all levels of the organisation.

This is generally defined through a risk management policy which outlines the company’s intent for managing risk and how it relates with the corporate objectives and other organizational policies and procedures.

The policy identifies who is accountable and responsible for the management of risk and the organisations commitment to make available, resources to assist those accountable and responsible.

It also documents the way in which risk management performance will be reviewed and measured and how an organisation will show commitment to the continual improvement of the risk management process.

To support the policy requirements, procedures are generated to guide stakeholders in carrying out the policy objectives and the risk management process.

Procedures should define:

- Hazard identification and reporting process,
- When a risk assessment is required,
- Who is responsible for carrying out risk management processes and who is to be involved,
- How to conduct the assessment,
- The process for risk control,
- Responsibility for completion of any corrective actions,
- Timeframes for implementing those actions, and
- The process for monitoring and reviewing the effectiveness and continual improvement of risk controls.

Additionally, there should be communication and reporting systems established for internal stakeholders to support and encourage ownership and accountability and also a system for reporting to external stakeholder (legislative requirements).

An organisation should monitor and measure the performance of the framework and its processes to determine the effectiveness and where continual improvement can be made.

Resources allocated to the risk management framework evolve around people, skills, competence and experience along with documented processes, methods and tools to manage risk, information and knowledge requirements a training and development.

The risk management processes should comply with all legislative requirements and decision making in line with the risk management processes.

Throughout the implementation process, securing commitment from management and workers through consultation and communication is the key to a successful integration.

*Note: to expand on the principles of risk management please refer to AS/NZS ISO 31000:2009 Risk Management - Principles and Guidelines and "How to Manage Work Health and Safety Risks, Code of Practice".*

#### 4. Who has duties in relation to Hazard Identification and Risk Management

A PCBU has the primary duty of care to ensure, so far as is reasonably practicable, that workers and other persons are not put at risk from work carried out as part of the business or undertaking.

A PCBU will have health and safety duties to manage risks if they:

- Engage workers to undertake work for them, or direct or influence work carried out by workers
- May put other people at risk from the conduct of their business or undertaking
- Manage or control the workplace or fixtures, fittings or plant at the workplace
- Design, manufacture, import or supply plant, substances or structures for use at a workplace
- Install, construct or commission plant or structures at a workplace.

All "Officers" of a PCBU are personally responsible (duty) for ensuring compliance with workplace health and safety laws. Officers must take reasonable steps to:

- Gain an understanding of the hazards and risks associated with the operations of the business or undertaking.
- Ensure that the business or undertaking has and uses appropriate resources and processes to eliminate or minimise risks to health and safety.

A duty imposed on a person to ensure health and safety requires the person to eliminate risks to health and safety, so far as reasonably practicable, and if it's not reasonably practicable to eliminate risks to health and safety, to minimise those risks so far as is reasonably practicable.

A person must comply with imposed duty to ensure health and safety to the extent that the person has a capacity to influence and control the matter.

Workers' have a duty and obligation to:

- take reasonable care his or her acts or omissions (actions or words), do not adversely affect the health & safety of other persons,
- comply, so far as the worker is reasonably able, with any reasonable instruction designed to protect their health and safety and, that of any other persons while at work,

- co-operate with any reasonable policy or procedure relating to health or safety at the workplace that they have been notified of,
- Managers, supervisors & team leaders are also deemed Workers. Duties are not transferable and a person can have more than 1 duty.

A mine operator must:

1. Identify all principal mining hazards (PMH) at the mine,
2. Conduct, in relation to each principal mining hazard identified, a risk assessment that involves a comprehensive and systematic investigation and analysis of all aspects of risk to health and safety associated with the principal mining hazard, and
3. In conducting a risk assessment under sub-regulation (2), must:
  - a. use investigation and analysis methods that are appropriate to the principal mining hazard being considered; and
  - b. Consider the principal mining hazard individually and also cumulatively with other hazards at the mine.

*Note: The MAQOHSC principle mining hazard guide is available in the MAQOHSC resource manual and also on the MAQOHSC website - [www.maqohsc.sa.gov.au](http://www.maqohsc.sa.gov.au)*

## 5. What is Reasonably Practicable

Reasonably Practicable in relation to a duty to ensure health and safety means that, which is, or was at a particular time, reasonably able to be done to ensuring health and safety. This includes, taking into account and weighing up all relevant matters about:

- the likelihood of the hazard or the risk concerned occurring;
- the degree of harm (injury or damage) that might result from the hazard or the risk;
- what the person concerned knows, or should reasonably know, about the hazard or the risk;
- ways of eliminating or minimising the risk; and
- Available ways of eliminating or minimising the risk, the cost associated, including whether the cost is grossly disproportionate to the risk.

## 6. What competencies are required and who is involved?

The person instructed with the task of undertaking / leading the hazard identification and risk assessment process should be a competent person and have good knowledge, experience and skills in hazard identification and the assessment of risk. Additionally, they should be able to apply the hierarchy of control when addressing / controlling different levels of risk.

A risk assessment must be undertaken in consultation with workers and their health and safety representatives (if any), who are involved in the task or process. This also includes consulting with the workgroups when identifying and controlling principal mining hazards and risks.

If there is more than one business or undertaking (eg, contractors) involved at your workplace you must consult them and their workers as part of the risk assessment process. It is often more effective to involve a team of people in the risk assessment process to draw on a range of knowledge and experience to ensure risks are eliminated or reduced so far as is reasonably practicable.

**For the purposes of this guide, the following sections will focus on the risk management process of identifying, analyzing, evaluating, treating, monitoring and reviewing risk.**

## 7. Identification of the hazards (Risk Identification)

The first step in managing risks to health and safety in the workplace is identifying hazards.

- Identify all regularly performed tasks / work along with any plant, equipment, substances and environment that is used or occupied.
- Systematically and visually observe each task being undertaken to determine if there are any hazards and document them.
- Ask your workers about any health and safety problems they have encountered in doing their work and any near misses or incidents that have not been reported.
- Worker surveys can also be used to obtain information about matters such as workplace bullying, as well as muscular aches and pains that can signal potential hazards.

## 8. Hazard Identification chart

Types of Hazards	Potential Harm
<b>Hazardous manual tasks</b>	Overexertion or repetitive movement can cause muscular strain and sprains, skeletal / disc injury.
<b>Confined Spaces</b>	Engulfed / crushed by a free flowing solid or liquid, asphyxiation / suffocation, explosive or contaminated atmospheres, low air concentration levels or poor air quality.
<b>Explosives</b>	Unintended explosion, struck by shockwave and fly rock, fractures, bruises, lacerations, dislocations, concussion, permanent injuries or death
<b>Fire</b>	Ignition source, chemical incompatibility, burns, smoke inhalation, asphyxiation, death
<b>Gravity</b>	Falling objects, falls, slips and trips, bruises, lacerations, dislocations, concussion, permanent injuries, crushed
<b>Electricity</b>	Fire or explosion, electrical shock, burns or death
<b>Machinery and equipment</b>	Being hit by moving a vehicle, burnt by hot or cold componentry, caught in moving parts of machinery, entanglement, nip and shear points, puncture, stab
<b>Hazardous chemicals and substances</b>	Chemicals (acids, hydrocarbons, heavy metals) and dusts (such as asbestos and silica) respiratory illness or disease, burns, cancers or dermatitis
<b>Temperatures and Extreme weather conditions</b>	Sun burn, heat stroke and fatigue, hypothermia or frost bite
<b>Noise</b>	Permanent hearing damage from repeated exposure to loud noise or instantaneous loud noise. Deafness

<b>Radiation</b>	Ultra violet light, welding arc flashes, micro waves and lasers can cause burns, cancer or blindness.
<b>Biological</b>	Micro-organisms can cause hepatitis, legionnaires' disease, Q fever, HIV/AIDS or allergies
<b>Psychosocial hazards</b>	Work-related stress, bullying, violence and work-related fatigue (such as low pay), discrimination, harassment, production pressure, boredom, lack of recognition, job overload, threats of violence, suicide.

*Note: A general risk assessment and principle mining hazard risk assessment checklist tool is available in the MAQOHSC resource manual and also on the MAQOHSC website - [www.maqohsc.sa.gov.au](http://www.maqohsc.sa.gov.au)*

Where a worker has identified a hazard through normal operational activities, they should take steps to eliminate the hazard within the area of their control and capabilities, only if safe to do so!

Where the elimination of the hazard is beyond their control, they should immediately report the hazard to their supervision and take steps to warn others of the hazard and cordon off or highlight the location of the hazard until it can be reviewed and addressed by supervision.

Provisions should be in place to allow the worker to record the hazard through an internal hazard reporting process via either a paper based or electronic system which will document the identified hazard and allow management to monitor its progress for close via the risk management process.

*Note: A hazard reporting procedure template and hazard report form is available in the MAQOHSC resource manual and also on the MAQOHSC website - [www.maqohsc.sa.gov.au](http://www.maqohsc.sa.gov.au)*

## 9. Review Available Information

Analyse your records of health monitoring, workplace incidents, near misses, worker complaints, sick leave and the results of any inspections and investigations to identify hazards. During an investigation process, a hazard can be the root cause that resulted in the incident or a contributing factor which lead to the incident.

If someone has been hurt doing a particular task, then a hazard exists that could hurt someone else. These incidents need to be investigated to find the hazard that caused the injury or illness

*Note: An Incident investigation procedure and incident report form is available in the MAQOHSC resource manual and also on the MAQOHSC website - [www.maqohsc.sa.gov.au](http://www.maqohsc.sa.gov.au)*

Manufacturers and suppliers also provide information about hazards and safety precautions for specific substances (safety data sheets), plant or processes (instruction manuals).

Other available sources of information and advice on hazards and risks associated with mining and quarrying can be obtained from the regulators, industry associations, unions, technical specialists, safety consultants and even outside Australia in similar industries and environments.

## 10. Assessing the risks. (Risk Analysis)

Assessing the risks will help the mine/quarry operator take the correct action to eliminate the risk or where this is not reasonably practicable, minimise the associated risks. Risk assessments include one or more of the following:

- A visual inspection of the task / work

- Formal documented risk assessment
- Discussions with designers, manufacturers, suppliers, importers, workers or other relevant parties
- Testing (noise levels) or measurement (silica levels)
- A review of incident of harm and near miss data

When assessing risk, consideration must be given to:

- The nature of the hazard.
- How it may impact on health and safety and how many workers are exposed.
- The amount, frequency and length of exposure.
- How the work is organised including the layout and condition of work environment.
- Training and knowledge.
- type and condition of control measures available

Additionally, hazard identification and the risk assessment process must be conducted when:

- Planning – projects, work or activities
- Designing, commissioning / de-commissioning
- Before the introduction of new work, activities or tasks
- Before the buying of plant, substances or other goods and services
- Changes to how work is done
- Changes to legislation, standards, manufacturer or supplier information

Once the task / work and associated plant, equipment, substances and environment have been viewed and hazards have been identified, they must be risk assessed to determine the level of risk they pose to workers health and safety.

RISK MATRIX					
Likelihood	Consequences				
	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
A - Almost Certain	M	H	E	E	E
B - Likely	M	H	H	E	E
C - Possible	L	M	H	H	E
D - Unlikely	L	L	M	H	H
E - Rare	L	L	M	H	H

Using the risk matrix provided (or your own), determine the level of risk by assessing the:

- likelihood (chance) of harm occurring, and
- Most likely consequences (injury or damage) if harm was to occur.

Calculating these factors will give you a risk rating score and determine whether there is an extreme, high, moderate or low risk to a workers health and safety.

## 11. Prioritising the risks. (Risk Evaluation)

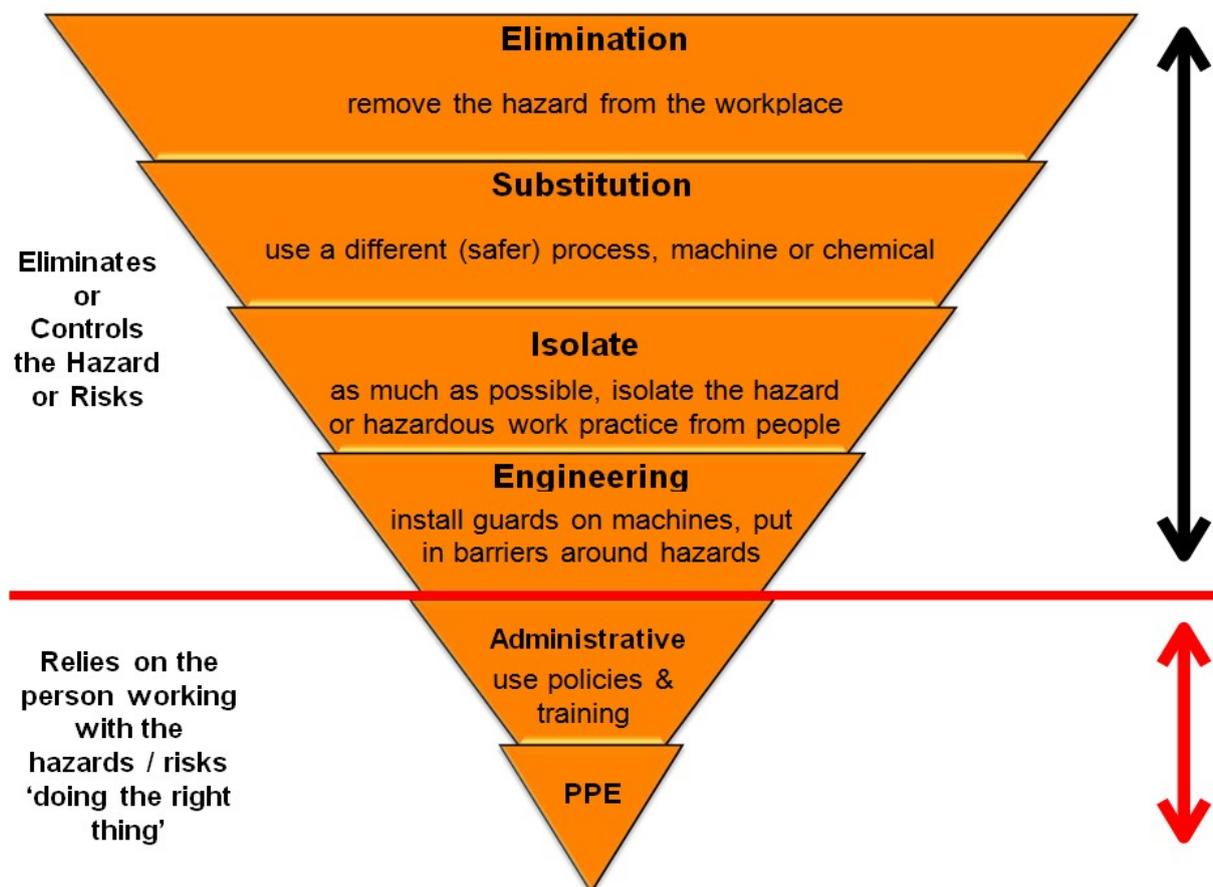
Once you have determined the risk rating for each hazard, you then need to prioritise the actions to be addressed with the highest level of risk being treated first.

## 12. Controlling the risks. (Risk Treatment)

WHS legislation requires a PCBU (mine/quarry operator) to do all that is reasonably practicable to eliminate or minimise risks.

The ways of controlling risks are ranked from the highest level of protection and reliability to the lowest.

This ranking is known as the **hierarchy of control**.



**You must work through this hierarchy of Control to manage risks to health and safety.**

The first thing to consider is whether hazards can be completely removed from the workplace. For example, risks can be eliminated by physically separating pedestrian routes from vehicle areas.

This could be done by conducting activities at times when pedestrians are not present, using physical barriers or overhead walkways.

Where it is not reasonably practicable to completely eliminate the risk, then consider one or more of the following options in the order they appear below to minimise risks:

- substitute the hazard for something safer e.g. replace forklifts with other load shifting equipment like a walker stacker or pallet jacks;
- isolate the hazard from people e.g. by creating a delivery area away from other pedestrians or work activities;
- Use engineering controls e.g. speed limiters on dump trucks or presence sensing devices on loaders.

If after implementing the above control measures a risk still remains, consider the following controls in the order below to minimise the remaining risk, so far as is reasonably practicable:

- Use administrative controls e.g. warning signs to alert personnel of dangers, specific machinery requirements, speed limits or exclusion zones.
- Use personal protective equipment (PPE) e.g. high visibility clothing.

A combination of the controls set out above may be used if a single control is not enough to minimise the risks.

You need to consider all possible control measures and make a decision about which are reasonably practicable for your workplace.

Deciding what is reasonably practicable includes the availability and suitability of control measures, with a preference for using substitution, isolation or engineering controls to minimise risks before using administrative controls or PPE.

Cost may also be relevant, but you can only consider this after all other factors have been taken into account.

### 13. Documenting corrective actions / controls (risk treatment plans)

Documenting how you intend to address the risk should be completed through risk treatment plans, more commonly known as corrective action plans.

Action plans should identify the hazard, control measures, risk levels, persons responsible for completing the actions and time frames for completion.

*Note: A general risk assessment checklist tool is available in the MAQOHSC resource manual and also on the MAQOHSC website - [www.maqohsc.sa.gov.au](http://www.maqohsc.sa.gov.au)*

For mining operations, when preparing a principal mining hazard management plan (PMHMP) it must:

- Include the management of all aspects of the risk controls in relevant to the PMH
- Be set out and expressed in a way that is easily understandable and made readily accessible for workers who use the PMHMP.

*Note: Principal Mining Hazard Management Plans (PMHMPs) must form part of the existing safety management system (SMS) of a site or organisation. For guidance on PMHMP, Please refer to PMH*

## 14. Information, training, instruction and supervision

Responsibilities for health and safety management must be clearly allocated. It is important each worker, contractor, subcontractor and other relevant people clearly understand their role in following safe work practices and taking reasonable care of themselves and others.

Before any workers including contractors, undertakes a task on your site, you must provide that worker with the appropriate information, instruction, training or supervision necessary to protect them and others from the risks associated with the work.

This includes any associated plant, equipment or tools they will use as part of the work, along with the environment they will be working in.

Risk assessment documentation must be made available to workers and they must be informed of the hazards and risks related to their work and their working environment and the risk control to prevent harm.

Procedures should be generated for workers to ensure the safe work practices are documented, standardised and easily understandable and workers must be trained in these safe work procedures.

For tasks / work that's not regularly performed, a job hazard analysis (JHA) or a safe work method statement (SWMS for construction work) should be completed.

Additionally, certain types of work, plant and equipment require a person to have certain licences and competencies to be able to safely perform their duties.

Supervision should also be provide to ensure safe work procedures are being followed, particularly if you are relying on administrative control measures to minimise risks.

## 15. Review of control measures.

It is important to monitor risks and check the control measures to ensure they remain effective.

*The South Australian WHS Regulations 2012* requires a review of the control measures to be undertaken whenever there are any changes associated with a task, process, plant and equipment, chemicals or the work environment.

In undertaking the review, workers who are protected by the control measures, their health and safety representatives (if any) and other PCBU's and their workers must be consulted and given the opportunity to contribute information and their ideas.

The following questions should also be considered:

- Are the control measures working effectively in both their design and operation?
- Are all hazards being identified?
- How effective is the risk assessment process?
- Are workers actively involved in the risk management process?

- Are workers openly raising health and safety concerns and reporting problems promptly?
- Have new work methods or new equipment made the job safer?
- Is the safe work procedure effective and accurate?
- Are safety procedures being followed?
- Has instruction and training provided to workers been successful?
- If new legislation or new information becomes available, does it indicate current controls may no longer be the most effective?

## 16. Record Retention

In the risk management process, records provide the foundation for improvement in methods and tools, as well as in the overall process.

Decisions concerning the creation of records should take into account:

- the organization's needs for continuous learning;
- benefits of re-using information for management purposes;
- costs and efforts involved in creating and maintaining records;
- legal, regulatory and operational needs for records;
- method of access, ease of retrievability and storage media;
- retention period; and
- Sensitivity of information.

## Appendix A: Hazard Report Form and Risk Matrix

### PART A: HAZARD IDENTIFICATION – TO BE COMPLETED BY WORKER

Workers Name: \_\_\_\_\_ Time Reported:     /     am / pm     Date:     /     /

Workers Supervisor: \_\_\_\_\_

Exact Location of Hazard: \_\_\_\_\_

Description of Hazard: \_\_\_\_\_

Immediate actions taken: \_\_\_\_\_

Workers suggested solution to control the hazard: \_\_\_\_\_

\_\_\_\_\_

---

Workers Signature: \_\_\_\_\_

### PART B: TO BE COMPLETED BY SUPERVISOR

**Hazard Investigation Found:** \_\_\_\_\_

\_\_\_\_\_

**Can Hazard be Eliminated Immediately?**

**YES**  Supervisor to eliminate Hazard and signoff Part B then forward to *(insert relevant position, e.g. WHS Advisor)*.

Describe Actions Taken: \_\_\_\_\_

\_\_\_\_\_

**NO**  Supervisor to assess hazard (in consultation with worker) and determine risk level (Refer to Risk Assessment Matrix)

<b>Risk Rating</b>	<b>Hierarchy of Control Used: (one or combination)</b>
<b>Extreme:</b> Stop work until risk control implemented <input type="checkbox"/>	<b>Substitution</b> <input type="checkbox"/>
<b>High:</b> Implement risk control within 3 days <input type="checkbox"/>	<b>Engineering</b> <input type="checkbox"/>
<b>Moderate:</b> Implement risk control within 1 week <input type="checkbox"/>	<b>Administration SOP/Training</b> <input type="checkbox"/>
<b>Low:</b> Regularly monitor hazard <input type="checkbox"/>	<b>Personal Protective Equipment</b> <input type="checkbox"/>

**Risk Control Measure Action Plan: Supervision (in consultation with worker) determines and implements risk controls.**

Action	Responsibility	Target Date	Completed

Are Controls Completed & Assess? **YES**  **Do Not pass on unless risk has been Satisfactorily Controlled!**

Feedback to Worker who raised Hazard Report Form? **YES**

Supervisor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### PART C – TO BE COMPLETED BY (Insert position title) e.g. WHS Superintendent, WHS Coordinator

**Hazard has been Assessed & Controlled**

(Insert position title) e.g. WHS Superintendent, WHS Coordinator

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### PART D – TO BE COMPLETED BY MANAGER

**Hazard has been Assessed & Controlled to my satisfaction**

Manager's Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## RISK MATRIX

Likelihood	Consequences				
	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
A - Almost Certain	M	H	E	E	E
B - Likely	M	H	H	E	E
C - Possible	L	M	H	H	E
D - Unlikely	L	L	M	H	H
E - Rare	L	L	M	H	H

### Risk Matrix Legends

Rating	Safety	Health	Environment
<b>1 Minor</b>	Single minor injury to one person. First aid or no treatment required. No lost time.	Reversible health effects of minor concern, only requiring first aid treatment.	Issues of non-continuous nature with promptly reversible impact or consequence (e.g. within shift). Low-level incident, site contained.
<b>2 Moderate</b>	Medically treated injury. Reversible injury. Does not lead to restricted duties.	Reversible health effects of concern that results in medical treatment but not leads to restricted duties.	Issues of a non-continuous nature and minor impact and consequence. Low-level incident, site contained. Short term reversible (e.g. within days).
<b>3 Serious</b>	Reversible injury or moderate irreversible impairment. Less than 10 days lost time.	Severe but reversible health effects. Results in a lost time illness of less than 10 days.	Issues of a continuous nature - limited impact and consequence Incident resulting in some site contamination. Medium term recovery impact.
<b>4 Major</b>	Severe irreversible damage to one or more persons. Lost Time Injury greater than 10 days	Severe and irreversible health effects or disabling illness.	Compliance issue with large fine, media attention. Serious harm not immediately recovered. Significant site contamination or off-site impact. Long term recovery.
<b>5 Catastrophic</b>	Fatality. Permanent disabling injuries	Life threatening or permanently disabling illness.	Issues of a continuous nature with major long-term impact and potentially serious consequences

Rating	Descriptor	Description	Suggested Frequency
<b>A</b>	Almost certain	The event is expected to occur	Recurring event during the lifetime of a project/operation, e.g. More than once per month
<b>B</b>	Likely	The event will probably occur	Event that may occur frequently during the lifetime of a project/operation, e.g. At least once per year
<b>C</b>	Possible	The event should occur	Event that may occur during the lifetime of a project/operation e.g. once in 3 years
<b>D</b>	Unlikely	The event could occur	Event that is unlikely to occur during the lifetime of a project/operation e.g. once in 10 years
<b>E</b>	Rare	The event may occur only in exceptional circumstances	Event that is very unlikely to occur during the lifetime of a project/operation, e.g. Once in 15 years

Rating	Definition	Level of Involvement
<b>Extreme</b>	No works shall be conducted until controls are implemented to reduce the risk level. Formal risk assessment required.	Mine Operator needs to review and approve risk control measures before allowing work to recommence
<b>High</b>	Corrective action required. Normally permits required to perform work. SWP or JHA mandatory	Mine / Quarry Manager review required
<b>Moderate</b>	Corrective action required. JHA or SWP required	Supervisor / Superintendent review required
<b>Low</b>	Corrective action where practical. Take 5 risk assessment required	Supervisor to manage by routine procedures at operational level



Appendix C: Risk Assessment Checklist – Obtain from MAQOHSC Web Site Resource section under tools

**REASONS FOR RISK ASSESSMENT**

Company:

Site Location

Is the risk assessment due to new or proposed changes to plant and equipment, a work process, hazardous chemicals or the environment?

YES

NO

If **Yes**, please tick the corresponding box:

Plant & Equipment?

Work Process?

Hazardous Chemicals?

Environment?

Describe the change:

If **No** is the risk assessment required due to a hazard that has not been previously risk assessed? (Please tick)

YES

NO

If **Yes**, was the hazard identified as a result of **Hazard Report**? (Please tick)

YES

NO

If **No**, was the hazard identified as a result of **Incident Report**? (Please tick)

YES

NO

If none of the above describe the reasons for the risk assessment review e.g. safety management system / document review:

**Additional Details or Comments:**



## Appendix E: Legislation, Standards, Codes and Guides

### Legislation

- WHS Act 2012 [SA];
- WHS Regulations 2012 [SA];
- The Environment Protection Act 1993 [SA], Section 25 – General environmental Duty

### Codes

- Code of Practice – How to Manage Work Health and Safety Risks;

### Standards

- AS/NZS ISO 31000:2009, Risk Management

### MAQOHSC Resources

- Hazard Identification and Control Procedure
- Risk Management Procedure
- Risk Assessment Instructions
- Risk Assessment Checklist
- Principle Mining Hazard Guide
- Principle Mining Hazard Risk Assessment Checklist – Road and other vehicle operating areas
- Traffic Management Inspection Checklists