



# RIIRIS301D

## Apply risk management processes

THIS UNIT FORMS PART OF THE  
RIISS00045 Work Zone Traffic Control Guidance Plan  
Developer Skill Set

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## Unit of Competency

RIIRIS301D	Apply risk management processes
Application	This unit describes a participant's skills and knowledge required to apply risk management processes in the Resources and Infrastructure Industries. This unit is appropriate for those working in operational or supervisory roles.
Elements	Performance Criteria
1. Plan and prepare for risk management	<ul style="list-style-type: none"> <li>1.1. Access, interpret and apply risk management documentation and ensure the work activity is compliant</li> <li>1.2. Inspect and analyse work area conditions regularly and systematically to identify potential hazards</li> <li>1.3. Access, interpret and apply existing procedures to control identified hazards</li> <li>1.4. Identify hazards not controlled by existing procedures</li> <li>1.5. Recognise the type and scope of unresolved hazards and their likely impact</li> </ul>
2. Assess and identify unacceptable risk	<ul style="list-style-type: none"> <li>2.1. Consider and determine the likelihood of an event</li> <li>2.2. Evaluate and determine the consequence of the event</li> <li>2.3. Consider and determine the risk level (likelihood and consequence combined)</li> <li>2.4. Identify or source the criteria for determining the acceptability/unacceptability of the risk</li> <li>2.5. Evaluate the risk and identify 'unacceptable risk' status</li> </ul>
3. Review risk management documentation	<ul style="list-style-type: none"> <li>3.1. Monitor and review working instructions</li> <li>3.2. Seek authority and approval to amend in writing the working instructions</li> <li>3.3. Seek authority and approval to action amendments to the working instructions</li> </ul>
4. Identify and recommend controls	<ul style="list-style-type: none"> <li>4.1. Identify the range of controls which may eliminate or minimise the risk</li> <li>4.2. Conduct a detailed analysis of feasible options including the identification of resource requirements</li> <li>4.3. Select the most appropriate control for dealing with the situation</li> </ul>
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# Introduction

## Risk management

Effective Risk Management is seeking to either prevent, or at least reduce an organisation's risk levels. Risk Management is also being prepared and able to reduce the impact of problems if and when they occur. It includes having plans to manage crises and ensuring there is adequate insurances to cover and reduce any potential legal liability.

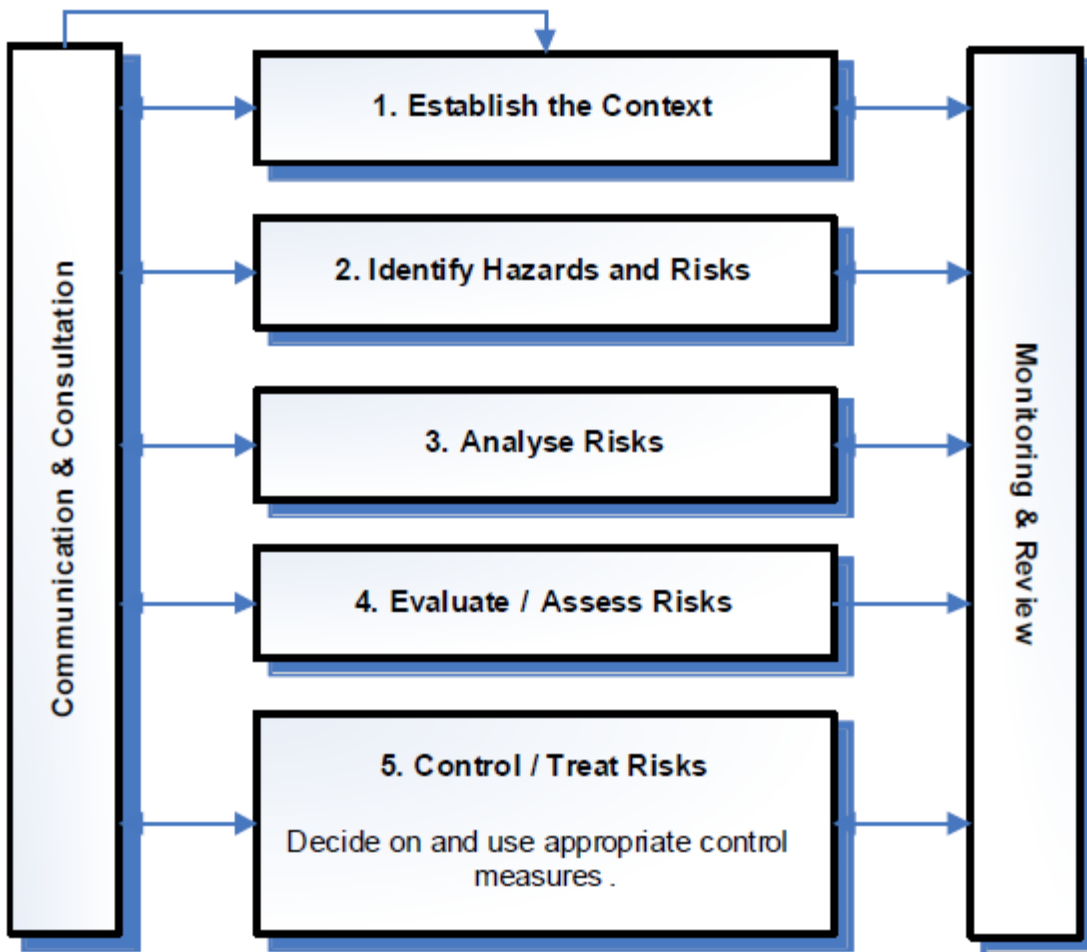
Risk Management is an ongoing process that should be applied to all aspects of your organisation's activities. Hazard identification and risk management are critical elements of WHS. These must be integrated into all RMS' work activities. All appropriate steps must be taken to identify any foreseeable workplace hazard/s that pose a risk to RMS workers and others. Effective risk management is vital in providing best WHS standards.

WHS risk management is integral to RMS' planning and operational processes. RMS promotes a culture of and empowers workers in the management of risk. Effective risk management requires managers, supervisors and workers to understand the nature of hazards in their workplaces. They should be able to systematically identify, analyse, evaluate, treat, monitor and review WHS risks associated with workplace hazards. Good WHS outcomes depend on everyone's commitment and cooperation.

We make our workplaces healthier and safer by:

- Executives and managers committing to active leadership and sound safety governance
- Maintaining a contemporary safety management system that takes account of people's capabilities
- Managing risk - elimination before minimisation through early intervention in planning and design
- Creating a just and fair culture that encourages the reporting of hazards and occurrences –near-misses, incidents and accidents – to enable organisational learning
- Empowering workers to participate in creating and maintaining a safe and healthy workplace
- Consulting with workers on health and safety matters
- Consulting, cooperating and coordinating with our industry partners and others to achieve our common health and safety goals
- Committing to continuous improvement and assurance processes

## Overview of the risk management process.



# 1 Plan and prepare for a risk management

## 1.1 Access, interpret and apply risk management documentation and ensure the work activity is compliant

Risk management is important for good governance, as well as legal compliance. By effectively managing the risks it faces, your organisation can guard against poor decision-making, complacency and inadvertent exposure to any potentially debilitating consequences of its actions, as well as meet its objectives in delivering services to clients.

In addition, the principles of good governance dictate that those responsible for the management of an organisation have an obligation to protect the interests of its stakeholders. All stakeholders expect organisations to manage risks in accordance with good governance principles and practices.

For all these reasons, risk management policies, documents, processes and activities need to be aligned with the other policies, processes and activities in the organisation. To maintain compliance, your organisation will be required to have robust and detailed documentation to support governance. Your work site will have some form of site Health and Safety Management System as well as Risk plans and procedures.

This system will include risk management elements and practices that ensure safety and health of workers on site. It is the primary means by which an operator ensures the health, safety and welfare of employees and others at a work site.

### **Work Health and Safety Documents and Procedures on a work site may include:**

- Personal Protective Equipment (PPE)
- Hazard identification and risk assessment
  - **(SWMS, JSEA etc.)**
- Personal health and hygiene
- Working with hazardous substances
- Working with plant and mobile equipment
- Environmental protection
- Fire prevention and fire fighting
- Site communications
- Training systems and records
- Emergency response
- Tagging and isolation
- Defect reporting system
- Standard Operating Procedures
- Work instructions
- Risk register
- Hazard reporting forms

## 1.2 Inspect and analyse work area conditions regularly and systematically to identify potential hazards

Workplace inspections for hazard are risks should be part of everyday work life and should be part of any Policy and Procedure DNA. A systematic approach to the identification of hazards and risks, becomes a continuous improvement activity and promotes proactive management procedures.

### Hazards

A hazard is anything that can cause harm to a person. It is important to identify all situations or events that could cause harm. Some ways of identifying hazards include:

- Conducting regular, systematic inspections of the workplace and maintaining records of the inspections and outcomes
- Reviewing past incidents
- Observing workplace activities
- Trying to predict potential hazards by asking 'what if?' questions
- Seeking staff opinions within the workplace concerned, involving their representatives including HSRs. This may be during regular staff meetings or through other targeted strategies
- Having HS committee members and/or HSRs assist in identifying hazards

Hazards must be actively identified. Times when this must occur include:

- Before performing a task/work activity
- Before using a premises as a place of work
- Before and during the installation, erection, commissioning, or alteration of plant
- Before changes to work practices and systems of work are introduced
- Before hazardous substances are introduced
- Whilst work is carried out
- When relevant health and safety information becomes available

The most effective way to identify workplace hazards may be through a workplace inspection. Task/work activity review, observation, audits, incident reports are also very effective. These activities should be conducted regularly in each work area with the aim of identifying hazards that may typically be overlooked. A prioritised list of identified hazards should be produced after each inspection.

### Example of hazards

Falls from height  
Manual handling  
Mobile plant  
Electricity  
Knives  
Hot surfaces  
Welding  
Radiation  
Chemicals

### Examples of Risks

Falls to lower levels  
Sprains and strains  
Struck by plant  
Electrocution/shock  
Cuts  
Burns  
Fume/gas inhalation  
Exposure to radiation  
Skin/eye contact, ingestion

## Risks

A risk arises when it's possible that a hazard will actually cause harm. The level of risk will depend on factors such as how often the job is done, the number of workers involved and how serious any injuries that result could be.

Risk is usually described in risk management through a risk rating which is calculated based on the possible consequences of the hazard and the likelihood that the hazard will cause harm

Poor work practices create hazards – examples of unsafe work practices commonly found in the workplace include:

- using machinery or tools without authority
- operating at unsafe speeds or in violation of safe work practices
- removing or disabling guards or other safety devices on machinery or equipment
- using defective tools or equipment or using tools or equipment in unsafe ways
- using hands or body instead of tools
- overloading, crowding or failing to balance materials or handling materials in other unsafe ways, including improper lifting
- repairing or adjusting equipment that is in motion, under pressure, or electrically charged
- failing to use and/or maintain, or improperly using personal protective equipment or safety devices
- creating unsafe, unsanitary or unhealthy conditions by improper personal hygiene, poor workplace maintenance or by smoking in unauthorized areas.
- standing or working under suspended loads, scaffolds, shafts,

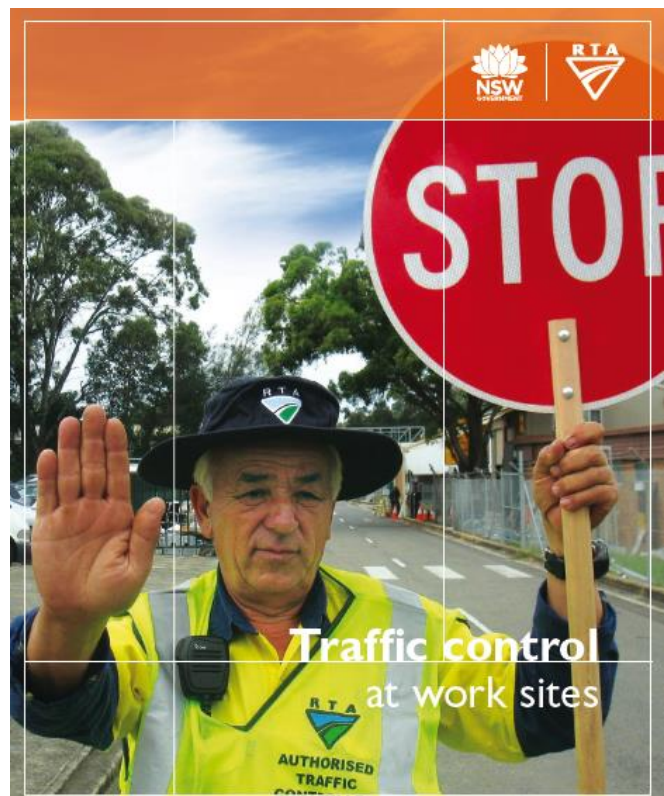
## Checklist to inspect the Workplace and assist you with identifying potential hazards

There are many tools to assist us with identifying potential hazards.

Some tools are developing by organisations, industry or even Roads Authorities.

In NSW for example the Roads & Maritime Services has a guide manual called "Traffic Control at worksites". In this manual there are 4 specific checklists that be used to identify hazards.

The first checklist is in appendix C, whilst the other 3 are found in appendix E.





### 1.3 Access, interpret and apply existing procedures to control identified hazards

What are some of the current procedures that exist in your workplace?

Are they formal or informal?

Are these procedures accessible and do all staff know where to find them and to follow them?

What value do organisations place on existing procedures for identifying hazards and what do they use to measure their effectiveness.

Let's take a look at some of these existing procedures that may exist

- Previous or current experience
- Site inspections
- Quality audits
- Equipment checks
- Consultation
- General observation
- Monitoring
- Injury statistics/records

### 1.4 Identify hazards not controlled by existing procedures

If we do not look for it, we may not know it exists! **Workplace inspections are a must!**

Existing procedures are valuable at identifying common and present hazards, hazards that we are familiar with, but what about the hazards that we may not know about. This can be quite tricky due to the fact that we may not have identified the hazard.

A simple approach may be WHAT IF....

Another approach is to breakdown all tasks within the workplace using a Job Hazard Analysis (JHA) Tool. Job Safety Environmental Analysis (JSEA) simply means looking at the work task and considering what is the safest way to complete it. It is a way of becoming aware of the hazards involved in doing the job and taking action to prevent an injury.

### 1.5 Recognise the type and scope of unresolved hazards and their likely impact

Hazards will be present in workplaces all of the time, some of these hazards we may not eliminate, but we can control them, we can isolate them and put controls in place to minimise the risk.

What is the impact of unresolved hazards?

All staff have an obligation to identify workplace hazards by:

- undertaking a regular inspection of their work area;
- undertaking analysis of job tasks, procedures and practices;
- regular consultation with other staff and supervisors in their immediate work area;
- eliminating any hazards (if safe to do so);
- ensuring all hazards are reported through their immediate manager/supervisor,

What is the impact, when the above processes and procedures are followed and the issue has not been addressed?

What are some of the reasons why workplace hazards are not addressed immediately and if not at all?

- Ignored completely
- Fear of reporting (blame, being labelled a complainer)
- Costs involved
- Paperwork not completed correctly
- Change of staff and management

What are some of the impacts if hazards are not reported or resolved?

- Loss of life
- Injuries not resolved effectively
- Unacceptable exposure to workers
- Damage to plant and equipment
- Down time due to costs
- Project delay
- Loss of contract
- Legal action
- Workers compensation and claim issues
- Fines
- Corrective action resulting from investigations

## 2 Assess and identify unacceptable risk

What does unacceptable risk mean?

*Unacceptable risk* means that the potential for failure is too high.

Assessing WHS risks is a way of determining the likelihood or potential a hazard will cause injury or ill health to anyone at or near a workplace. The number of people exposed to the hazard and the duration and frequency of exposure will also influence the level of risk. After identifying a hazard, an assessment of its associated risks must be performed.

We can use a number of risk matrix tools and approaches to assist in this process. To determine the level of risk that is attached to a hazard, a formula can be used. This is provided as follows:

### **Risk Assessment Formula**

$$\text{Consequence (1) X Likelihood (2) = Risk Level (3)}$$

(Likelihood = Probability X Exposure)

### 2.1 Consider and determine the likelihood of an event

Under Australian Standards there are currently 5 terms that are recognised when describing the likelihood of an event taking place.

Level 5 Almost Certain

- Consequence is expected to occur in most situations

Level 4 Likely

- Consequence will probably occur in most situations

Level 3 Possible

- Consequence should occur at some time

Level 2 Unlikely but possible

- Consequence could occur at some time

Level 1 Rare

- Consequence may occur under exceptional situations

**Risk Matrix will assist you in determining the level of risk.** We can use numbers, words etc. Please refer to matrix on page 13.

### Prompts and information to consider when determining the risk level

<b>Consequence (1) – How bad could the injury be</b>	<b>Likelihood of Consequence occurring (2) - Where Likelihood = Probability x Exposure</b>
<p><b>Considerations include:</b></p> <ul style="list-style-type: none"> <li>- What are the consequences of exposure in the short term?</li> <li>- What are the consequences of exposure in the long term?</li> <li>- What is the history of injuries related to exposure of that hazard?</li> <li>- How close is the worker to the hazard?</li> <li>- What is the energy level of the hazard (i.e. weight, voltage, volume, amplitude, height above ground, concentration, aggressive state)?</li> <li>- If the substance is hazardous, what are the health effects associated with:               <ul style="list-style-type: none"> <li>- Ingesting it</li> <li>- Inhaling it</li> <li>- Absorbing it through the skin or the eyes</li> </ul> </li> </ul>	<p><b>Considerations include:</b></p> <ul style="list-style-type: none"> <li>- How often is the work task performed?</li> <li>- What is the duration of exposure – time period of exposure i.e. 5 min, 1 hour, 1 shift</li> <li>- What is the frequency of exposure – How often i.e. constant exposure, twice per shift, etc</li> <li>- What is the dose / concentration of exposure?</li> <li>- Existing Controls               <ul style="list-style-type: none"> <li>- Consider existing controls that may effect the likelihood of the consequence occurring i.e.:</li> <li>- Are engineering controls preventing exposure?</li> <li>- Does the layout and condition of the workplace affect exposure?</li> </ul> </li> </ul>

## 2.2 Evaluate and determine the consequence of the event

This step requires you to:

- Estimate consequences (how bad could the injury be) – fatality, lost time injury (LTI), medical treatment (MTI), first aid (minor injury)
- Estimate the likelihood of the consequence, taking into account any existing controls that are in place
- Determine the level of each risk

## 2.3 Consider and determine the risk level (likelihood and consequence combined)

To determine the risk level/rating, the following risk assessment reckoner (matrix) should be used. This rating then forms the basis for action prioritisation.

### WHS Risk Assessment Reckoner/Matrix

CONSEQUENCES – HOW BAD IS IT LIKELY TO BE?	LIKELIHOOD - HOW LIKELY IS THE CONSEQUENCE TO OCCUR?			
	Very Likely to happen (VL)	Likely to happen. has occurred in the past (L)	Unlikely to happen, but rare (U)	Very Unlikely <i>could</i> happen, but probably never will (VU)
Extreme – fatality, or cause permanent disability or ill health (K)	1	1	2	3
Major – long term illness or Injury > 5 days of work (S)	1	2	3	4
Moderate – medical attention, or < 5 days off work (M)	2	3	4	5
Minor – first aid needed (F)	3	4	5	6

(Adapted from WorkCover's HAZPACK Worksheet and AS 4360 Risk Management.)

## 2.4 Identify or source the criteria for determining the acceptability/ unacceptability of the risk

**“As Low As Reasonably Practicable” (ALARP) concept.** This concept originated from the health and safety legislation from the United Kingdom, from terminology ‘so far as is reasonably practicable (SFARP) language that is reflected in legislation in Australia.

In essence, it says that if the cost of reducing a risk outweighs the benefit, then the risk may be considered tolerable. We also have to consider what the industry best practice is doing. In other words, we are supposed to “do whatever it takes within our organisation as long as its reasonably practical”. In the next section we will discuss this concept further.

You might decide that some levels of risk are acceptable; you can simply live with them and do nothing about them. They might result in negligible harm or be so improbable that it would be a poor use of resources to do much about them.

On the other hand, you might need to do something about fairly improbable risks if the amount of harm is overwhelmingly catastrophic. It might cost very little to put contingency plans or counter-measures in place, so they could be very good value on a cost-benefit basis.

WHS uses a hierarchy of controls, so all substantial risks can be managed. That is, no substantial WHS risk is acceptable.

*ISO 3100: Risk criteria* are terms of reference and are used to evaluate the significance or importance of an organisation's risks. They are used to determine whether a specified level of risk is acceptable or tolerable.

*Risk criteria* should reflect your organisation's values, policies, and objectives, should be based on its external and internal context, should consider the views of stakeholders, and should be derived from standards, laws, policies, and other requirements.

Prior to specifying risk criteria, the categories for which risks will be evaluated shall be defined.

These include:

- human health and safety;
- environmental protection;
- legal and regulatory compliance;
- cost;
- project schedule;
- reputation;

The following points should be considered when defining risk criteria:

- the nature and type of causes and consequences that can occur and how they will be measured;
- how likelihood will be defined (for example qualitatively or as a quantitative probability);
- the timeframe of interest;
- how the level of risk is to be determined;
- the level at which the risk becomes acceptable or tolerable;
- whether combinations of multiple risks should be taken into account and, if so, how and which combinations should be considered

In order for the risk criteria to be adequate support it need to:

- be suitable for decisions regarding risk reducing measures to levels as low as reasonably practicable;
- be suitable for communication;
- be unambiguous in their formulation;
- not favour any particular concept solution explicitly nor implicitly through the way in which risk is expressed

## 2.5 Evaluate the risk against criteria to identify 'unacceptable risk' status

What does unacceptable risk mean?

***Unacceptable risk means that the potential for failure is too high.***

Evaluating risk against criteria is subject the organisations identification of what is acceptable and unacceptable. Whilst the previous section discusses mechanisms and criteria, although unacceptable risk status is still subjective as organisations, managers and workers may have differing views and ways to measure risk.

This may be based on;

- Experience and familiarity
- Overall perception and identification process
- Cultural differences (e.g. experiences from other parts of the world)
- There is a always the cost in the background
- Also the effectiveness of the current control system

If this is the case, then why have and evaluation process if there is the chance that the results or treatment may be inconsistent?

The reason is, there is still an inherent and statutory responsibility of continuous improvement, minimising risks and to ensure that there are strong measure in place. Any improvement is an improvement none the less.

So how can we determine 'acceptable' vs 'unacceptable? A common method is divide the risks into 3 bands as the "As Low As Reasonably Practicable" (ALARP) concept. This concept originated from the health and safety legislation from the United Kingdom, from terminology 'so far as is reasonably practicable (SFARP) language that is reflected in legislation in Australia.

In essence, it says that if the cost of reducing a risk outweighs the benefit, then the risk may be considered tolerable.

As stated earlier, what is 'reasonably practicable' is determined objectively, this means that a duty-holder must meet the standard of behaviour expected of a reasonable person in the duty-holder's position and who is required to comply with the same duty.

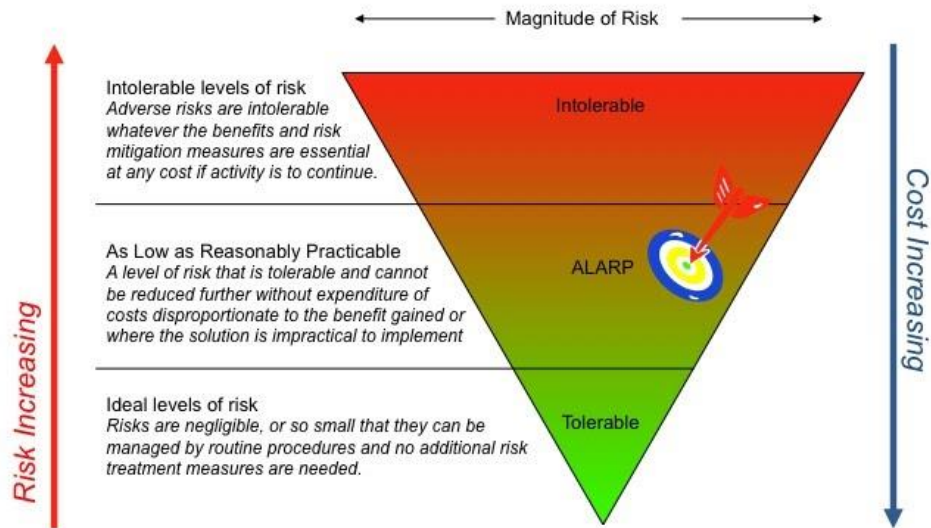
There are two elements to what is 'reasonably practicable'.

A duty-holder must first consider what can be done - that is, what is possible in the circumstances for ensuring health and safety.

They must then consider whether it is reasonable, in the circumstances to do all that is possible

Safe Work Australia

### Common models based on ALARP



The objective of using this model/method is to transition the risk from unacceptable through to acceptable



## 3 Review risk management documentation

### 3.1 Monitor and review working instructions

Throughout the risk management process monitoring and review must occur to ensure effectiveness of actions, and to ensure that no new hazards and related risks have been introduced. Monitoring and review should also be done following occasions of successful control of previous workplace hazards. This is especially important where actions taken to eliminate hazards or minimize WHS risks have worked and continue to be effective.

Systematic monitoring and review determines or identifies:

- The successes achieved in dealing with identified hazards
- New hazards.
- An opportunity for continuous improvement

New hazards that may have been inadvertently created through a risk response may happen because of:

- Use of new technology, equipment or substances
- Use of new work practices or procedures (including unfamiliarity with these)
- Introduction of changes within the work environment
- Introduction of new staff with different experience and competencies

Incorporating WHS and hazard management into the annual planning process is an effective way of achieving the aim of an incident-free workplace. Managers should set up a timetable to periodically inspect worksites to:

- Ensure that new control measures are effective
- Review risk assessments on current hazards
- Identify any new actual or potential hazards
- Raise new issues at staff meetings
- Encourage input from staff at any time, if processes are not effective

### 3.2 Seek authority and approval to amend in writing the working instructions

Work instruction, policy and procedures, standard operating procedures, SWMS are significant pieces of information that support and contribute to the welfare and safety of workers, as well as the public.

Work instruction should never become stagnant and inactive; any work instruction within high risk environments need to be reviewed and evaluated regularly, this process will be part of the risk management plans and continuous improvement approach of the organisation.

These documents normally reflect statutory and legislative requirements; any changes or upgrades that need to occur must be formalised and systematic.

Not just anyone within the organisation can make changes; changes must be identified, researched, and reviewed.

**Consultation with relevant stakeholders** such as industry bodies, councils, Roads authority etc. needs to occur along with recommendations and feasibility approaches adopted.

In most instances this activity is carried out by a compliance officer or quality assurance person and or risk manager.

### 3.3 Seek authority and approval to action amendments to the working instructions

Once approval has been gained to amend in writing, the next phase is to action the amendments. This cannot be done immediately; generally additional consultation and case testing may occur to ensure the work instructions are appropriate.

The QA or Risk manager will seek approval to amend the instructions and include the following:

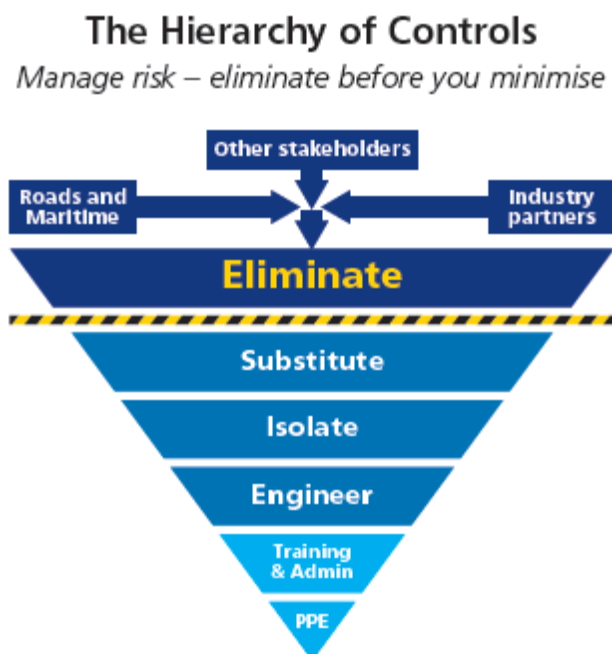
- Consultation process
- Feasibility
- Stage implementation
- Conduct Training
- Sign off on changes
- Review

## 4 Identify and recommend controls

### 4.1 Identify the range of controls which may eliminate or minimise the risk

After identifying the hazard(s), risk(s), and the level of risk for each risk, it is now necessary to identify and implement appropriate risk control(s). Where no single measure is sufficient for this, a number or combination of risk controls is usually required.

When determining control measures to adopt, the Hierarchy of Control must be applied. This is outlined in the following figure.



The hierarchy of control creates a systematic approach to manage safety in your workplace by providing a structure to select the most effective control measures to eliminate or reduce the risk of certain hazards that have been identified as being caused by the operations of the business.

### **Eliminating the hazard and associated risk**

The most effective control measure involves eliminating the hazard and associated risk. The best way to do this is by, firstly, not introducing the hazard into the workplace. For example, you can eliminate the risk of a fall from height by doing the work at ground level.

Eliminating hazards is often cheaper and more practical to achieve at the design or planning stage of a product, process or place used for work. In these early phases, there is greater scope to design out hazards or incorporate risk control measures that are compatible with the original design and functional requirements. For example, a noisy machine could be designed and built to produce as little noise as possible, which is more effective than providing workers with personal hearing protectors.

### **Substitute the hazard with something safer**

For instance, replace solvent-based paints with water-based ones.

### **Isolate the hazard from people**

This involves physically separating the source of harm from people by distance or using barriers. For instance, install guard rails around exposed edges and holes in floors; use remote control systems to operate machinery; store chemicals in a fume cabinet.

### **Use engineering controls**

An engineering control is a control measure that is physical in nature, including a mechanical device or process. For instance, use mechanical devices such as trolleys or hoists to move heavy loads; place guards around moving parts of machinery; install residual current devices (electrical safety switches); set work rates on a production line to reduce fatigue.

### **Use administrative controls**

Administrative controls are work methods or procedures that are designed to minimise exposure to a hazard. For instance, develop procedures on how to operate machinery safely, limit exposure time to a hazardous task, use signs to warn people of a hazard.

Administrative controls and PPE should only be used:

- when there are no other practical control measures available (as a last resort)
- as an interim measure until a more effective way of controlling the risk can be used
- to supplement higher level control measures (as a back-up).

### **Use personal protective equipment (PPE)**

Examples of PPE include ear muffs, respirators, face masks, hard hats, gloves, aprons and protective eyewear. PPE limits exposure to the harmful effects of a hazard but only if workers wear and use the PPE correctly.

### **Implementing controls**

The control measures that you put into operation will usually require changes to the way work is carried out due to new or modified equipment or processes, new or different chemicals or new personal protective equipment. In these situations, it is usually necessary to support the control measures with:

### **Work procedures**

Develop a safe work procedure that describes the task, identifies the hazards and documents how the task is to be performed to minimise the risks.

### **Training, instruction and information**

Train your workers in the work procedure to ensure that they are able to perform the task safely. Training should require workers to demonstrate that they are competent in performing the task according to the procedure. It is insufficient to simply give a worker the procedure and ask them to acknowledge that they understand and are able to perform it. Training, instruction and information must be provided in a form that can be understood by all workers. Information and instruction may also need to be provided to others who enter the workplace, such as customers or visitors.

### **Supervision**

The level of supervision required will depend on the level of risk and the experience of the workers involved. High levels of supervision are necessary where inexperienced workers are expected to follow new procedures or carry out difficult and critical tasks.

Safe Work Australia "How to manage Work Health and Safety Risks' Code of Practice

## **4.2 Conduct a detailed analysis of feasible options including the identification of resource requirements**

When assessing the capability and effectiveness of the control measures under consideration you should think about whether the control measures:

- have been selected in accordance with the hierarchy of controls (order of preference);
- are distributed appropriately with representation of the different types of control namely; engineering, procedural and administrative;
- have adequate layers of protection;
- consider the full range of operating and emergency circumstances;
- consider common mode failures;
- are effective;
- are reasonably practicable; and
- reduce the risk to a level that is ALARP

Options need to consider

- Functionality
- Availability
- Reliability
- Survivability
- Dependency
- Compatibility

### **4.3 Select the most appropriate control for dealing with the situation**

In order to come up with options for controlling the hazard or source of risk, you need to understand how and why the hazard or source of risk could cause harm or loss

- Assess the likelihood of the risk associated with the hazard causing injury or illness:
- Investigate the degree of harm that would result if the hazard or risk of the hazard eventuated:
- Ask what the relevant workers know about the hazard or risk, and any ways of eliminating or reducing the hazard or risk:
- Evaluate the availability and suitability of ways to eliminate or reduce the hazard or risk:
- Balance the factors above with the cost of eliminating or reducing the hazard or risk
- The overall impact of the control on the operation
- Will the control create new hazards

## 5 Contribute to the implementation of controls

Once control measures have been selected to address hazards and sources of risks, you can begin to think about how those controls can be put in place.

### 5.1 Write up the risk management plans selected control in detail, including resource requirements

Developing the risk management plan will help you deal with adverse situations in an effort to head them off before they arise. In an effort to write up the plan, you will need verify the plan then you will need to identify what.

In short a risk Management Plan

- describes the potential risks;
- contains an analysis of the impact of each risk
- includes risk strategies to help the business reduce the consequences if the event occurs
- review and update the pan
- Conduct an impact analysis

Range of resources that you may need to write up the plan may include

- Specific Information and data
- Technology
- Plant and equipment
- Environmental information
- Finances
- HR
- Pen, Paper
- Transportation
- Time
- Money

## 5.2 Gain authorisation for selected control

Now that you have identified a number of controls, mechanisms, approaches and even outcomes, authorisation is the next step.

Just because the control looks good, there may be a number of issues or circumstances that may prevent it from being selected, these may include

- Costly
- Waiting for legislative requirements
- Time consuming

The simple approach may be to eliminate the issue entirely! As with any changes within the workplace, you need to gain approval from management, stakeholders.

## 5.3 Document and review controls for the job

Documenting each step within the risk management process is important as an appropriate level and standard of documentation may be required to satisfy an independent auditing process. We also have a legal requirement to maintain records and have them available. Another reason is that we can use these records for future reference.

Once it has been decided what the best and most practical control for a particular Hazard/Risk is, this needs to be documented.

The safe work procedure for the job needs to be written based on those risks and controls.

Some questions you may ask in this process

- Have the controls solved the problem?
- Is the risk posed by the original hazard contained?
- Have any new hazards been created?
- Are new hazards appropriately controlled?
- Are monitoring processes adequate?
- Have workers been adequately informed about the situation?
- Have orientation and training programs been modified to deal with the new situation?
- Are any other measures required?
- Has the effectiveness of hazard controls been documented in your committee minutes?
- What else can be done?

All identified hazards and their controls should be documented, usually referred to as a Hazard Register.

- Hazards and controls need to be reviewed regularly, or when
- New plant or substances are introduced to the workplace
- Before work of a type not previously performed at the workplace is commenced
- When there is a change in the type of work, work practices or plant that may result in an increased risk to workers or others
- When information becomes available concerning work, work practices, plant or substances that may impact of workers or others

## Hazard Register

Location	Item	Effects of hazard	Risk assessment	Risk control	By whom	Action timetable	Action (Y/N)

## Risk Registers

Activity/Hazard	Risk (what could go wrong)	Safety Control	Check/is it working	Person(s) responsible

## 5.4 Apply procedures to control recognised hazards

Work health and safety hazards and their associated risks can be triggered when any changes affect work activities. This includes but is not limited to the following:

- Changes to work practices, procedures or the work environment.
- Purchase, hire, lease, commissioning/decommissioning, erection, dismantling of new or used plant, structures and equipment.
- Purchase of new substance and products.
- Planning to improve productivity or reduce costs.
- New information about workplace risks becoming available.
- Responding to workplace hazard and injury incidents (even if they have caused no injury).
- Responding to concerns raised by workers, HSRs or others at the workplace

Applying any procedure requires a level of authority, training and management direction; consider the roles and responsibilities of all involved.

There are several ways in which we can communicate these this type of information to relevant or interested parties:

- Toolbox talks
- Inductions
- Meetings
- Training sessions
- Emails etc.



Role	Authority/Responsibility for
Contractors	Must as part of their contract: <ul style="list-style-type: none"> <li>• Comply with the WHS legislative requirements in regards to the management of hazards and their associated risks.</li> <li>• Consult, cooperate and coordinate with site managers on any activities that may affect the health and safety of workers and other persons while conducting work within any workplace</li> </ul>
Health and Safety Committee (HSC)	The functions of a health and safety committee are: <ul style="list-style-type: none"> <li>• To facilitate co-operation between the company and workers in instigating, developing and carrying out measures designed to ensure the workers' health and safety at work.</li> <li>• To assist in developing standards, rules and procedures relating to health and safety to be followed or complied with at the workplace.</li> <li>• Any other health and safety related functions prescribed by the regulations or agreed between the company and the committee.</li> </ul>
Health and Safety Representatives (HSRs)	HSR have powers and functions. They are to: <ul style="list-style-type: none"> <li>• Represent the workers in the work group in matters relating to work health and safety.</li> <li>• Monitor the measures taken by the company in compliance with the WHS Act in relation to workers in the work group.</li> <li>• Investigate complaints from members of the work group relating to work health and safety.</li> <li>• Inquire into anything that appears to be a risk to the health or safety of workers in the work group, arising from the conduct of THE COMPANY.</li> </ul>
Other persons	While at a the workplace, other persons must: <ul style="list-style-type: none"> <li>• Take reasonable care for his or her own health and safety; and</li> <li>• Take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons; and</li> <li>• Comply, so far as the person is reasonably able, with any reasonable instruction that is given by any officer or worker of the company</li> <li>• In relation to this procedure others persons must also:               <ul style="list-style-type: none"> <li>• Report all hazard and injury incidents to the site manager <u>as soon as possible but within 12 hours of the event.</u></li> <li>• Wear appropriate PPE</li> </ul> </li> </ul>
Site Managers	It is the responsibility of site managers, who has management or control of the workplace, to ensure hazard management is a fundamental element of work health and safety management within their workplace by: <ul style="list-style-type: none"> <li>• Complying with all requirements of this procedure.</li> <li>• Consulting with:               <ul style="list-style-type: none"> <li>- Affected workers during all stages of the hazard management process.</li> <li>- The work group HSR where one has been elected.</li> </ul> </li> <li>• Ensuring consultation, cooperation and coordination of activities occurs with other persons conducting a business or undertaking (PCBUs) where a shared duty in relation to the management of a hazard exists.</li> <li>• Ensuring a hazard is resolved immediately within 24 hours of receipt of the Hazard Report Form from a worker or undertaking an investigation and risk assessment in accordance with this procedure where a hazard cannot be resolved immediately.</li> </ul>

	<ul style="list-style-type: none"> <li>Ensuring a mandatory risk assessment is undertaken for activities involving plant, hazardous chemicals, manual tasks, infection control and inclement weather as required.</li> </ul>
Workers	<p>It is the responsibility of workers to be involved in hazard management by:</p> <ul style="list-style-type: none"> <li>Reporting all hazard and injury incidents to the site manager <u>as soon as possible but within 12 hours of the event</u>.</li> <li>Participating in the development, implementation and review of WHS&amp;IM policies and procedures for hazard identification, risk assessment and control of hazards and risks within their workplace.</li> <li>Attending meetings, training and information sessions regarding the management of any identified workplace hazard, as required.</li> <li>Complying with any reasonable instructions provided by the site manager in relation to WHS.</li> <li>Ensuring appropriate PPE is worn where a THE COMPANY safe operating procedure or a risk assessment has determined the use of appropriate PPE as a risk control.</li> </ul>

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## 5.5 Communicate information on the control and its implementation

Communication is the key to ensuring that the control is in place and is effective. Good communication is essential for any effective risk management strategy. Managing risks involves everyone in your organisation: board/committee, staff, volunteers, players/clients/members/visitors - anyone who comes into contact with your group.

It's vital therefore that everybody in your organisation understands what risk management is and why it is important, and that they are involved in developing and implementing a risk management strategy.

Below is a list of some effective and common strategies

- Risk Committees
- Regular meetings and tool box talks
- Brainstorming sessions
- Newsletter and bulletins
- SMS and news flashes using smart devices
- Questionnaires and surveys
- Keep it going

### Training

Once the control has been put into place, the workers need to be trained in how to use it. This applies whether it is an engineering control such as a guard or interlock, an administrative control such as a safe work procedure for cold weather or particular PPE when handling a chemical.

Training records and/or documented sign-offs are required to show that the workers have been made aware of the hazards and the controls.