

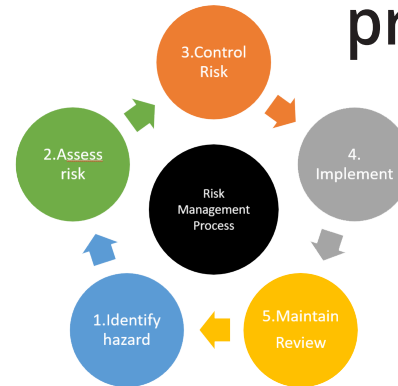
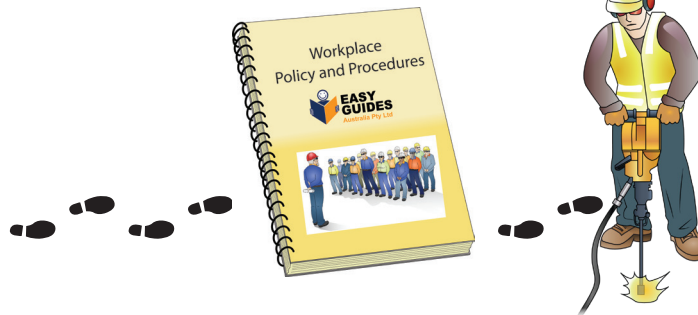
# LEARNER GUIDE



Training support material for:

## RIIRIS301E

# Apply risk management processes



Produced by:



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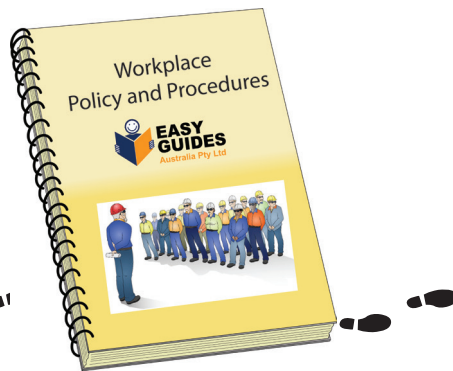
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## What is this unit about?

This unit is about following workplace procedures to carry out work activity safely, effectively and efficiently in relation to risk management process?

You will identify, assess, and mitigate risks in their work environment, ensuring that tasks are completed in a manner that prioritizes safety and effectiveness.



# Risk management process - Summary

In order to manage risk in the work place you must follow the following process and what is involved:

## 1. Identify the hazard.

Inspect documents & Inspect Worksite

Inspect documents and the worksite to pinpoint potential dangers.

## 2. Assess the risks

\*Assess Risk - use the risk matrix

Use a risk matrix to evaluate the likelihood and severity of the identified risks

## 3. Controlling risk

Use the hierarchy of control measures to manage the risk.

## 4. Implement

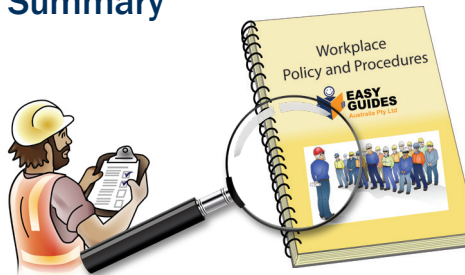
(Mitigate) by controlling the risks. Create an Implementation plan.

(Control Options) - Follow policy & procedures and do work on work site.

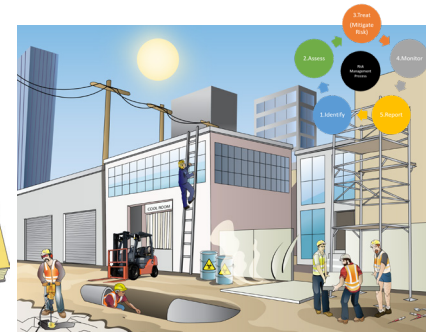
Follow policy and procedures to reduce risks and perform the work safely on the worksite.

## 5. Maintain and Review

(Monitor control measures). Continuously monitor and review the effectiveness of control measures. - Perform a quality check.



Identify the hazard

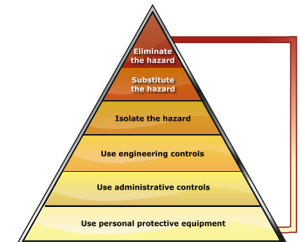


Likelihood How likely is it to happen?	CONSEQUENCES: How severely it hurts someone (if it happens)				
	Insignificant (no injury)	Minor (first aid treatment only, nothing controlled at site)	Moderate (medical treatment, hospital, confined but with suitable)	Major (serious injuries, loss of production)	Catastrophic (death, loss of limbs or chemicals)
Almost certain — expected in most circumstances	3 High	3 High	4 Acute	4 Acute	4 Acute
Clearly — will probably occur in most circumstances	2 Moderate	2 High	3 High	3 Acute	4 Acute
Possible — might occur at some time	1 Low	2 Moderate	3 High	4 Acute	4 Acute
Unlikely — could occur at some time	1 Low	1 Low	2 Moderate	3 High	4 Acute
Rare — may occur, only in exceptional circumstances	1 Low	1 Low	2 Moderate	3 High	3 High

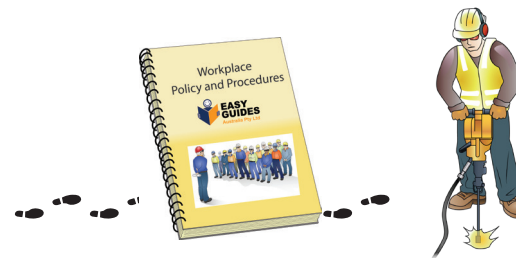
  

Risk Score and Statement				
4 Acute Act now — URGENT Do everything you can to reduce the risks immediately Require immediate attention.	3 High Highest management attention is required urgently.	2 Moderate Follow management instructions.	1 Low OK for now. Second and third line of any management program to prevent changes.	

Risk Matrix



Hierarchy of control



Follow policy & procedures and do work on work site



Maintain and Review  
Quality check

# Sample work order - for digging a trench - Document 1000

## 1000 Sample Work Order for Excavating a Trench and Laying Concrete Piping

<b>Work Order Number</b>	WO-2024-001
<b>Date Issued</b>	2024-06-01
<b>Issued By</b>	John Doe, Project Manager
<b>Project Name</b>	Southfield Pipeline Installation
<b>Location</b>	Southfield Industrial Park, Lot 5

Step	Description	Assigned To	Estimated Start Date	Estimated Completion Date	Comments/Notes
<b>1</b>	<b>Site Preparation</b>	Site Prep Team	2024-06-02	2024-06-03	Clear area, ensure accessibility for machinery.
1.1	Clear the designated area of any obstructions.	Mike Smith	2024-06-02	2024-06-02	
1.2	Ensure the site is accessible for heavy machinery and equipment.	Laura Green	2024-06-02	2024-06-02	
<b>2</b>	<b>Excavation</b>	Excavation Team	2024-06-04	2024-06-05	Excavate to specified depth and width. Implement shoring as needed.
2.1	Excavate the trench to the specified depth and width.	John Brown	2024-06-04	2024-06-04	
2.2	Ensure the trench is stable and secure, implementing shoring as needed.	Jane White	2024-06-04	2024-06-05	
<b>3</b>	<b>Laying Concrete Piping</b>	Piping Team	2024-06-06	2024-06-07	Position and lay concrete pipes according to plans. Ensure pipes are aligned and securely joined.
3.1	Position and lay concrete pipes according to the engineering plans.	Steve Harris	2024-06-06	2024-06-06	
3.2	Ensure pipes are aligned and securely joined.	Susan Moore	2024-06-06	2024-06-06	
3.3	Perform quality checks to confirm alignment and sealing.	Robert Johnson	2024-06-07	2024-06-07	
<b>4</b>	<b>Backfilling and Compaction</b>	Backfill Team	2024-06-08	2024-06-09	Backfill and compact the trench to avoid settling.
4.1	Backfill the trench with appropriate material.	Linda Thompson	2024-06-08	2024-06-08	
4.2	Compact the backfill to avoid settling.	James Wilson	2024-06-08	2024-06-09	
<b>5</b>	<b>Site Cleanup</b>	Cleanup Crew	2024-06-10	2024-06-10	Remove debris and restore site.
5.1	Remove any debris and excess materials.	Karen Lee	2024-06-10	2024-06-10	
5.2	Restore the site to its original condition or as specified.	Peter Parker	2024-06-10	2024-06-10	

### Safety Requirements

- Personal Protective Equipment (PPE):** Hard hats, safety glasses, high-visibility vests, steel-toed boots, gloves.
- Hazard Controls:** Implement control measures as per the risk assessment, ensure machinery and equipment are inspected and in good working condition, follow proper lockout/tagout procedures when working with equipment.

### Equipment and Materials

Equipment Required	Materials Required
Excavator	Concrete pipes
Backhoe loader	Backfill material
Compactor	Sealing materials
Concrete mixer	Protective barriers
Shoring materials	

### Personnel

Role	Assigned To
Supervisor	John Doe
Lead Excavator Operator	Mike Smith
Pipe Layer	Steve Harris
Laborers	Laura Green, Jane White

### Schedule

Start Date	2024-06-02
Completion Date	2024-06-10

### Sign-Off

Prepared By	Signature	Date
John Doe, Project Manager	<i>John Doe</i>	2024-06-01

| **Approved By | Signature | Date** | Jane White, Site Supervisor | *Jane White* | 2024-06-01 |  
 | **Completion Confirmation | Signature | Date** | Steve Harris, Lead Pipe Layer | *Steve Harris* | 2024-06-10 |

### Comments:

### Attachments:

- Engineering Drawings
- Safety Plan
- Risk Assessment Report
- Equipment Maintenance Records



# 000 Sample Risk Management Policy - documentation

Who would write this document? Risk Manager or Compliance Officer

000 Sample Risk Management Policy

## Introduction to Risk Management Principles

Risk management is a fundamental practice within the mining, drilling, and civil infrastructure industries. Our commitment is to systematically identify, assess, and control risks to protect our workforce, the environment, and our business operations. This policy is designed to embed risk management into all aspects of our projects to mitigate potential hazards and enhance operational outcomes.

### Objectives

The objectives of this Risk Management Policy are to:

1. Establish a structured framework for identifying, assessing, and managing risks associated with mining, drilling, and civil infrastructure activities.
2. Ensure compliance with relevant health, safety, and environmental regulations and standards.
3. Safeguard the health and safety of all employees, contractors, and the public.
4. Minimize environmental impact and protect existing infrastructure.
5. Foster a culture of proactive risk management and continuous improvement.

### Scope

This policy applies to all employees, contractors, and stakeholders involved in mining, drilling, and civil infrastructure projects. It encompasses all project phases, from planning and site preparation to execution, monitoring, and completion.

### Definitions

- **Risk:** The possibility of an event that could negatively impact project objectives, measured by likelihood and consequence.
- **Hazard:** Any condition or activity that can cause harm, injury, or adverse effects.
- **Risk Management:** The systematic process of identifying, evaluating, and controlling risks to reduce their impact.
- **Control Measures:** Strategies and actions implemented to mitigate or eliminate risks.

### Roles and Responsibilities

Project Manager	Safety Officer
<ul style="list-style-type: none"> <li>• Lead the implementation of the risk management process.</li> <li>• Ensure that risk management responsibilities are clearly defined and understood by all team members.</li> <li>• Approve risk assessments and control strategies.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and update risk management procedures.</li> <li>• Provide training and resources on risk management practices.</li> <li>• Review risk assessments and ensure adherence to safety regulations.</li> </ul>
Site Supervisor	Employees and Contractors
<ul style="list-style-type: none"> <li>• Conduct regular site inspections to identify potential hazards.</li> <li>• Implement and oversee control measures on-site.</li> <li>• Report incidents and emerging risks to the Project Manager.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow all risk management procedures and guidelines.</li> <li>• Participate in risk identification and assessment activities.</li> <li>• Report hazards and risks to the Site Supervisor or Safety Officer.</li> </ul>
Risk Manager	
<ul style="list-style-type: none"> <li>• Oversee the risk management framework across all projects.</li> <li>• Regularly review and update the risk management policy and procedures.</li> <li>• Collaborate with Project Managers and Safety Officers to ensure effective risk management.</li> </ul>	

### Policy Actions

To effectively manage risks, we follow a structured approach involving several key actions. These actions form the core of our risk management process and ensure comprehensive risk mitigation.

#### 1. Identify Hazards

- **Inspect Documents and Worksite:** Conduct regular inspections of the worksite and review relevant documents (e.g., safety reports, incident logs) to identify potential hazards such as equipment failure, hazardous materials, unstable ground conditions, and potential environmental impacts.
- **Engage Workers:** Consult with workers to gather insights on potential hazards they may encounter in their daily tasks.
- 2. **Assess Risks**
  - **Use Risk Matrix:** Evaluate the likelihood and severity of each identified hazard using a standardized risk matrix. Assign risk ratings to prioritize which risks require immediate attention.
  - **Documentation:** Document the findings and risk ratings in a risk assessment report.
- 3. **Control Risks**
  - **Hierarchy of Controls:** Apply the hierarchy of control measures to manage risks:
    - **Elimination:** Remove the hazard completely if possible.
    - **Substitution:** Replace the hazard with a less dangerous option.
    - **Engineering Controls:** Isolate people from the hazard through design and engineering solutions.
    - **Administrative Controls:** Change the way people work (e.g., training, procedures).
    - **Personal Protective Equipment (PPE):** Use PPE to protect workers as a last resort.
- 4. **Implement Controls**
  - **Implementation Plan:** Develop and execute a detailed plan to implement the chosen control measures. Ensure that all personnel are trained and informed about the controls in place.
  - **Monitor Compliance:** Conduct regular checks to ensure that control measures are being followed correctly.
- 5. **Maintain and Review**
  - **Continuous Monitoring:** Monitor the effectiveness of the control measures through regular safety audits and site inspections.
  - **Review and Update:** Periodically review and update the risk management plan to address new hazards or changes in the work environment. Ensure all documentation is up to date.

By following the Risk Management Policy Implementation Table, you ensure a systematic and thorough approach to managing risks within your projects.

### Risk Management Policy Implementation Table

Risk Management Action	Description
Identify Hazards	Conduct weekly site inspections and review safety reports to identify potential hazards like equipment failure, hazardous materials, and unstable ground conditions.
Assess Risks	Use a risk matrix to evaluate the likelihood and severity of identified hazards. Prioritize risks based on their potential impact.
Control Risks	Apply control measures following the hierarchy of controls: Elimination, Substitution, Engineering Controls, Administrative Controls, and PPE.
Implement Controls	Develop and execute a plan to implement control measures. Train personnel on the controls and monitor compliance.
Maintain and Review	Regularly monitor the effectiveness of control measures through safety audits and inspections. Update the risk management plan as needed.

This Risk Management Policy outlines our commitment to effectively managing risks in the mining, drilling, and civil infrastructure industries. By adhering to this policy and following the outlined implementation table, we aim to create a safe, compliant, and efficient work environment, thereby achieving our project objectives and protecting our workforce and the environment.

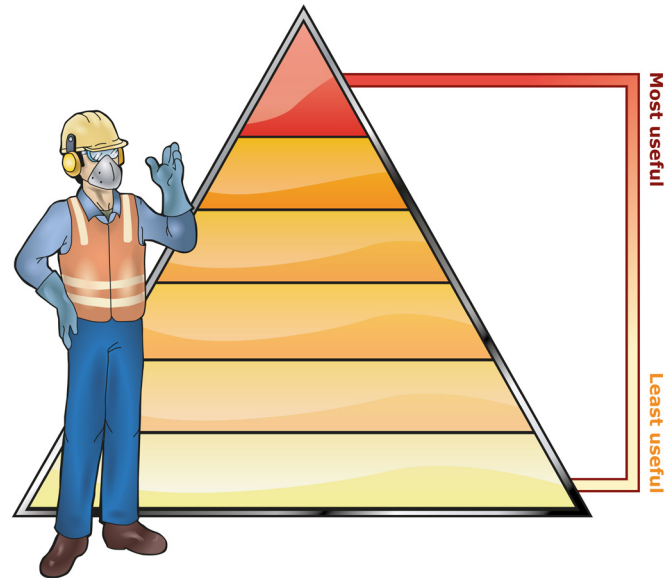
**Question 20**

How do we manage risk?

To manage risk;

Answer:

We use the hierarchy of controls to eliminate or remove the hazards.



**Question 22**

How do you control identified hazards?

To control identified hazards, you need to:

- a). Retrieve relevant documents,
- b). Retrieve relevant documents, Understand their guidelines, and Implement the specified safety measures.
- c). Implement the specified safety measures.

Answer: b). Retrieve relevant documents, Understand their guidelines, and Implement the specified safety measures.

