

# RIIERR302E

## Respond to Local Emergencies and Incidents

### Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course information that matches the PowerPoint presentation.
- Review questions.
- Practical assessment instructions for learners.

What do you need to do before you use it for the first time?

1. Rebrand the document.
2. Review the document as part of your validation process.
3. Set the reading and test time limits that are highlighted in pink at the end of the document.

**See the 'Read Me First' document for a complete set of instructions on how to use these resources.**

# LEARNER GUIDE

# RIIERR302E Respond to Local Emergencies and Incidents

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

## This Book Contains:

- ☐ Course Information.
- ☐ Review Questions.
- ☐ Practical Assessment overview and instructions.

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## 1.1 Introduction

These materials are based on the unit of competency **RIIERR302E Respond to Local Emergencies and Incidents**.

You will learn about:

- ◆ Preparing for emergencies and incidents.
- ◆ Identifying and communicating emergencies and incidents.
- ◆ Assessing the situation.
- ◆ Evacuating from the emergency or incident.
- ◆ Communicating and coordinating emergency response.
- ◆ Maintaining emergency control until help arrives.



## 1.2 Working Safely

You must follow all safety rules and instructions when performing any work. If you are not sure about what you should do, ask your boss or supervisor. They will tell you what you need to do and how to do it in a safe way.



### 1.2.1 Health & Safety Rules

Every workplace has to follow laws and rules to keep everyone safe. There are 4 main types:

<b>Acts</b>	These are laws that you have to follow.
<b>Regulations</b>	These explain what the law means.
<b>Codes of Practice</b>	These are instructions on how to follow the law, based on industry standards.
<b>Australian Standards</b>	These tell you what the minimum requirement is for a job, product or hazard.

Some states use OHS laws, and other states use WHS laws. They both talk about the same thing, but use different words or names for people. If you have any questions about safety rules you should talk to your boss or supervisor.



## 1.2.2 Emergency Operations Documentation

Before starting your work you need to make sure you have access to all emergency operations documentation for the job. This will help you to do your work in the safest way and make sure all work is compliant.

Emergency Operations documentation includes:

- ◆ **Site Details** – The information and safety requirements of the worksite environment.
- ◆ **Hazard Details** – Any hazards in the area or related to the situation. This could also include instructions on how to handle dangerous or hazardous materials.
- ◆ **Task Details** – Instructions on what the emergency or incident is or what you will be doing (this can include diagrams or plans). Also instructions on how to keep yourself and other workers safe.
- ◆ **Emergency Procedures** – Instructions on what to do in emergency situations, for example where evacuation or first aid is needed.



## 1.2.3 How to Keep Everyone Safe

WHS law says that all companies and workers need to keep themselves and other people safe while they work. This is called a duty of care.



To keep yourself and other workers safe you need to:

- ◆ Follow your instructions.
- ◆ Follow all workplace rules.
- ◆ Make sure all equipment is safe to use.
- ◆ Carry out your work safely.
- ◆ Report any problems.

If you think something is dangerous tell your boss or supervisor as soon as possible.

## Review Questions

**1.**

What are the 4 main types of health and safety rules?



1.

2.

3.

4.

**2.**

List 3 things that emergency operations documentation may include.



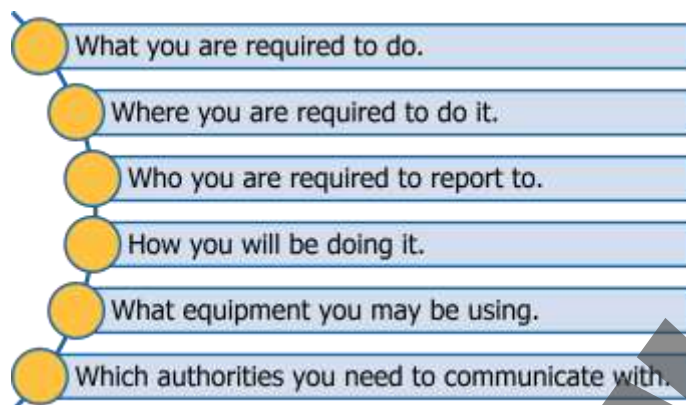
1.

2.

3.

# 1.3 Emergency Management Instructions

You need to be clear about what you are expected to do in any emergency situation. This includes:



All work needs to follow worksite, environment and company safety procedures. Procedures help to make sure that all operations are done in a safe way, without damaging equipment or putting people in further danger.

Your emergency management plan will tell you the primary procedures for responding to local emergencies and incidents at the mine. It is a good idea to check your instructions with your boss or supervisor to make sure you know exactly what you need to do.



The emergency management plan will outline information about:

Information	Example
<b>The Site and Hazards</b>	The location of the mine, a plan of the area both above and below ground, the maximum number of workers that should normally be on site, where protective resources are, details on isolating areas, the equipment and structures likely to be affected by an incident.
<b>Command Structure and Personnel</b>	Details of who is in charge, who to contact about the content in the emergency plan, the contact details of the person in charge of emergency response, emergency contacts and services, arrangements that have been set up for liaising with emergency services.
<b>Notifications</b>	Procedures for notifying personnel about the incident, which personnel to notify, the type of warning systems and their use, on-site communication systems, emergency personnel contact procedures.
<b>Resources and Equipment</b>	Location and use of on-site emergency resources (including first aid, monitors and spill kits), location and use of off-site resources (including rescue services and large equipment), details on the training that should be provided, the procedures for mine and plant operators, the use and maintenance of self-rescuers.
<b>Response Procedures</b>	Procedures for safe evacuation, how to account for all personnel at the mine, procedures for controlling utilities, what to do in the event of highly risky incidents occurring (such as ventilation systems failing, structures collapsing, vehicle collisions, inrush or outrush etc.), the trigger levels for when certain procedures should be carried out, where places of safety or meeting points are.



### 1.3.1 Emergency Responsibilities and Requirements

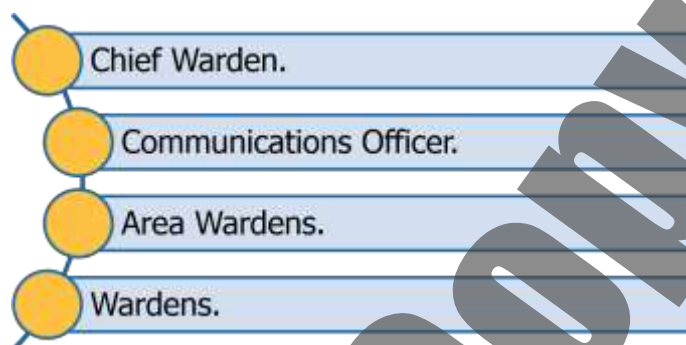


The Emergency Control Organisation (ECO) has the responsibility to command, control and coordinate how emergencies are responded to within the workplace.

They plan what they will do in the event of an emergency and what resources they will need.

The ECO Chief Warden or the Communications Officer will co-ordinate with the external organisations, such as emergency services, to ensure prompt assistance.

The roles and responsibilities within an ECO should include:



#### 1.3.1.1 Chief Warden

In an emergency, the Chief Warden needs to be able to act quickly and effectively. They are required to:

- ◆ Check the type of emergency.
- ◆ Decide on the right actions.
- ◆ Have the communications officer contact the Police, Fire or Ambulance on 000 if appropriate.
- ◆ Contact other members of the ECO team and give them instructions.
- ◆ Order the evacuation if necessary.
- ◆ Take the incident log and sign in book and sign off each person as they leave the building.
- ◆ Give the emergency responders a complete briefing when they arrive on scene, and then be prepared to coordinate with other emergency organisations.



Because the Chief Warden is responsible for checking that people are out as well as briefing and coordinating with the emergency departments, it is best if the Chief Warden evacuates in the first group of evacuations.

### 1.3.1.2 Communications Officer



In an emergency the Communications Officer should:

- ◆ Determine the location and nature of the emergency.
- ◆ Confirm the correct emergency service organisation has been contacted.
- ◆ Notify all appropriate ECO members.
- ◆ Pass information between the Chief Warden and other Wardens.
- ◆ Maintain a log of all communication activities they conduct.
- ◆ Contact the neighbouring businesses if the incident is likely to impact on them.

The Communications Officer should be amongst the last to leave the site if safe to do so.

### 1.3.1.3 Area Wardens

Area Wardens have the most active responsibility during an emergency response. They need to:

- ◆ Implement the appropriate emergency response procedures for their area, which may include commencing evacuation procedures for the area if circumstances require it.
- ◆ Make sure that the evacuation is as safe as possible.
- ◆ Move people to the appropriate evacuation point.
- ◆ Report to the Chief Warden and act on any instructions received.
- ◆ Instruct Wardens to check the area for anything out of the ordinary and confirm that the Warden activities have been completed and report results to the Chief Warden.



### 1.3.1.4 Wardens

In an emergency Wardens need to:



- ◆ Act as Area Wardens if needed.
- ◆ Ensure that smoke and fire doors are closed properly and that plant and equipment is secure.
- ◆ Conduct a search of the area to ensure all people have evacuated.
- ◆ Assist anyone having trouble leaving the site or area.
- ◆ Ensure evacuation flows in an orderly manner.
- ◆ Act as a leader for groups moving to evacuation areas.
- ◆ Report to Area Warden when activities have been completed.

### 1.3.2 Site Emergency Procedures

Site emergency and incident procedures will outline the required actions for emergency responses.

These plans and procedures should be included in the overall management system for the site and in the emergency management plan.

Each emergency management system should have developed plans for responding to the likely events as well as the possible events that could arise. These should meet any statutory, organisational or legislative requirements.

Emergency response procedures are developed by the emergency planning committee and the site ECO.

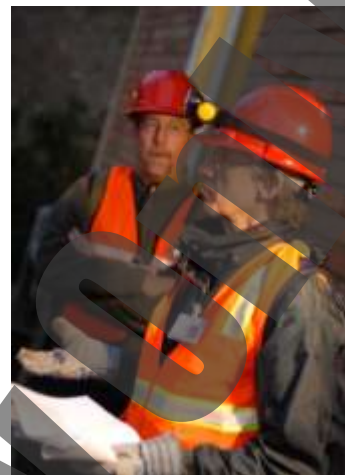
Site emergency plans and procedures will outline the expected actions and the available resources. Most will list the order in which actions are to be taken, with preservation of human life being the first priority.

It is important to coordinate with other workers and emergency personnel to make sure everyone knows what is going on, what you are planning to do and what they need to do.

Workers you may need to coordinate with during a site emergency may include:



- ◆ Other mobile plant operators.
- ◆ Processing plant operators.
- ◆ Maintenance workers.
- ◆ Water truck/cart operators.
- ◆ Service vehicle operators.
- ◆ Crane and float operators.
- ◆ Contractors.
- ◆ Inspectors, both internal and external, including WHS, environmental and quality assurance officers.
- ◆ Supervisors.
- ◆ Site visitors.
- ◆ Emergency response personnel.
- ◆ Local authorities.



### 1.3.2.1 Site Emergency Management Plans

When responding to an incident it is important for each person to be aware of the emergency management plans for the site.

A critical aspect of these plans will be emergency response procedures.

These procedures should be straightforward, requiring minimal interpretation, and should guide the reader through every step in the required response.

**Note:** Always remember that site plans and drawings reflect the conditions at the time they were created and may not accurately show current conditions faced by the emergency response team.



### 1.3.3 Geological and Survey Data

Geological and survey data tells you what the area is like and what things you will need to think about before entering the area.

It is used in site plans to give you an accurate view of what the site looks like and any areas you need to be aware of, such as voids, bench heights, traffic zones and circuits etc.



Accessing and working with both the site survey and geological data will enable you to:

- ◆ Identify the cause or nature of the emergency or incident.
- ◆ Determine possible response options and protective measures, including control and containment.
- ◆ Identify potential problem areas.
- ◆ Identify likely rescue, evacuation or shelter points.

#### 1.3.3.1 Geological Data

Geological data gives you information about:

- ◆ Rock or material types and characteristics.
- ◆ Wet and dry areas.
- ◆ Water tables or other sources of water.
- ◆ Broken ground, faults or joints.
- ◆ Compaction levels.

All of this information will help you to decide on what equipment you need to use, where and how you should travel with equipment and areas to avoid.





Geological Data Type	Information
<b>Material Types</b>	It is particularly important to know the rock types and characteristic of the rocks that may be involved at the incident scene to ensure the correct equipment is used, and in the correct manner.
<b>Wet and Dry Areas</b>	The load-shifting potential of wet materials is higher than with dry materials. This can cause a load to move unexpectedly during an incident or emergency. Areas that are very wet could slow response times and limit possible emergency actions.
<b>Water Tables</b>	Knowledge of the water table for the area being worked upon is important because of potential seepage or salinity that can affect the machinery that is being used. If blasting has occurred prior to an incident, the area may be wetter than originally expected. Geological data can also identify underground rivers and streams or other sources of water, which may impact on the type of incident that occurs and the way in which you respond to an emergency.
<b>Broken Ground, Faults and Joints</b>	The geological data for these tells you about material seams, ground faults, and other features of the work zone. This will enable you to make correct decisions about responding to the emergency, and to determine possible sites of developing emergencies.
<b>Compaction Levels</b>	The degree of compaction is important because it can determine the response times and dictate equipment types.

### 1.3.3.2 Survey Data

Survey data shows important worksite features, including:

- ◆ **Bench heights and widths** – these may form roads or entry and exit points within the work area or quarry.
- ◆ **Floor heights** – the height of the floor needs to be defined to ensure the structural stability of a mine area.
- ◆ **Floor, ramp and bench grades** – these are important for you to know in advance for the safety of response crews and equipment operators, e.g. a steep grade may cause undue movement of the materials.
- ◆ **Underground working and voids** – these include old mine shaft areas, sinkage areas or places where ground stability may be an issue.



Survey data can also be used to mark out:

- ◆ Work circuits.
- ◆ Pick up areas.
- ◆ Dump areas.
- ◆ Spill zones.
- ◆ Routes or traffic ways.

## Review Questions

**3.**

What will your emergency management plan tell you?

☐

**4.**

What will site emergency plans and procedures outline?

☐

**5.**

List 4 workers that you may need to coordinate with during a site emergency.

☐

1.

2.

3.

4.



6.

List 3 important worksite features that survey data will show you.



1.

2.

3.

## 1.4 Hazard Identification and Control

Identifying worksite hazards when responding to an incident is essential to your safety and the safety of your team. You need to assess the site you are in for hazards relating to the incident as well as non-related hazards which will still impact your activities.

If you find a hazard or danger you need to do something to control it. This will help to make the worksite safer.



### 1.4.1 Identify Hazards

Upon arrival at the incident scene, you must be able to identify hazards and potential hazards before they impact your rescue and recovery efforts. Then minimise further impacts on the operation, workers and the environment.

A **hazard** is the thing or situation that causes injury, harm or damage.

When you start checking for hazards, make sure you look everywhere. A good way to do this is to check:

- ◆ **Up high** above your head.
- ◆ All around you **at eye level**.
- ◆ **Down low** on the ground (and also think about what is under the ground).





Some hazards you should check for in the work area:

- ◆ Aircraft.
- ◆ Broken terrain.
- ◆ Biological hazards such as diseases and viruses.
- ◆ Chemicals.
- ◆ Confined spaces.
- ◆ Electricity.
- ◆ Environmental hazards such as rain, sun and wind.
- ◆ Falling objects.
- ◆ Fire.
- ◆ Personal hazards such as dehydration and heat stress.
- ◆ Heavy plant and machinery.
- ◆ Structures.
- ◆ Travelling in vehicles.
- ◆ Psychological hazards such as critical incident stress and shock.

## 1.4.2 Dynamic Risk Assessment

A Dynamic Risk Assessment (DRA) is the assessment of the level of risk in changing hazardous situations. It is undertaken prior to, during and after the execution of an operation.

A DRA involves the following six steps:

- 1 Hazard Identification.
- 2 Risk Assessment, i.e. who is at risk?
- 3 Risk Control, i.e. how can the risk be controlled?
- 4 Risk Elimination, i.e. how can the risk be eliminated?
- 5 Decision Benefits, i.e. weighing up the pros and cons of the decision.
- 6 Action versus No Action, i.e. deciding whether action should be taken.

What sets a DRA apart from a systematic risk assessment is that it is applied in situations that:

- ◆ Contain unpredictable/unforeseen risks.
- ◆ The risk environment rapidly changes.
- ◆ Allows individuals to make a risk judgment.
- ◆ Provide workers with a consistent approach to assessing risk.

