RIICRC304E

Maintain Sealed Roads

Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course training content (this matches the PowerPoint Presentation).
- Review questions.

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.

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

LEARNER GUIDE

RIICRC304E Maintain Sealed Roads

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

This Book Contains:

☐ Course Information.
☐ Review Questions.

Table of Contents

1.1 Introduction

These materials are based on the national unit of competency **RIICRC304E Maintain Sealed Roads**.

You will learn about:

- Planning and preparing for work.
- Storing, preparing and transporting materials.
- Repairing damaged or wearing surfaces and edges.
- Repairing pavement failures.
- Repairing and sealing surface cracks.
- Cleaning up the work area.

Roads and pavements naturally break down over time. State and local governments have road management and maintenance programs, which include regular, scheduled inspections for identifying faults or problems.

These inspections help to determine priorities and schedules for carrying out maintenance work and repairs to road surfaces, edges and pavements.

Road maintenance programs are often planned on a yearly schedule as they rely on budgets and available funding.

Different systems for marking distances and sections for repair may be used in different areas. Always remember to check that you are using the appropriate system so the correct area is repaired.

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 and Safety Rules

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

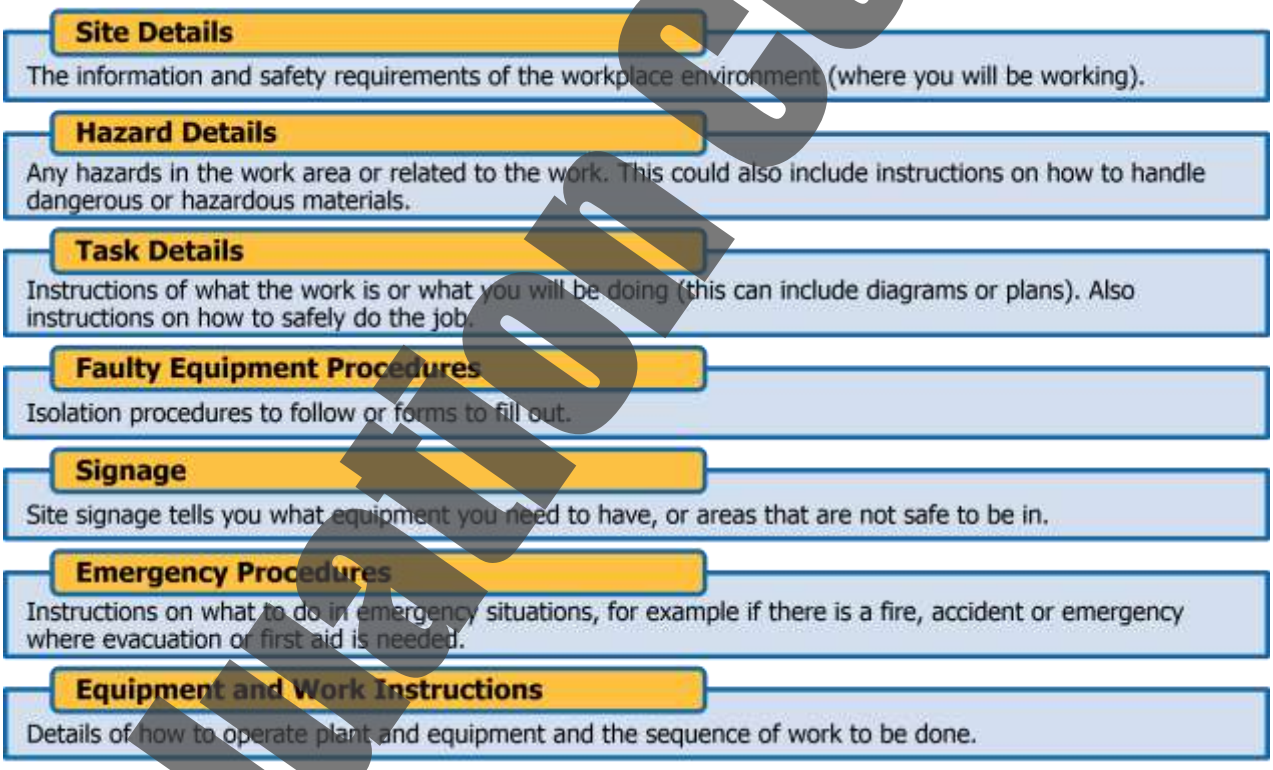
Rule	Explanation
Acts	These are laws that you have to follow.
Regulations	These explain what the law means.
Codes of Practice	These are instructions on how to follow the law, based on industry standards.
Australian Standards	These tell you what the minimum requirement is for a job, product or hazard.

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 Operations Documentation

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

Operations documentation includes:



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.

Your worksite will also have instructions for working safely including:

- Emergency procedures, including using fire fighting equipment, first aid and evacuation.
- Handling hazardous materials.
- Safe operating procedures.
- Personal protective clothing and equipment.
- Safe use of tools and equipment.

Review Questions

1.	What are the four (4) main types of health and safety rules that you need to follow?	☐

1.

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4.

2.	What information could you get from operations documentation?	

1.3 Work Instructions

You need to be clear about what work you will be doing. Make sure you have everything about the job written down before you start. This includes what you will be doing, how you will be doing it and what equipment you will be using.

1.3.1 Work Instruction Details

Make sure you have all of the details about where you will be working. For example:

- **The Site** – Is there clear access for all equipment? Are there buildings, structures, facilities or trees in the way? What are the ground conditions like?
- **The Weather** – Is there wind, rain or other bad weather? Is it too dark?
- **Facilities and Services** – Are there power lines or other overhead or underground services to think about?
- **Traffic** – Are there people, vehicles or other equipment in the area that you need to think about? Do you need to get them moved out of the area? Do you need to set up barriers or signs?
- **Hazards** – Are there dangerous materials to work around or think about? Will you be working close to power lines or other people?

You also need to make sure you have all of the details about the kind of work you will be doing:

- **The Task** – Where is the road maintenance required? How big is the damage? What type of maintenance is required? Does it need any special equipment?
- **Plant** – What type of plant will be used? How big is it? How much room does it need? Can it safely access the site?
- **Attachments** – What equipment will you need to maintain the road? Is the equipment available?
- **Communications** – How are you going to communicate with other workers?
- **Procedures and Rules** – Do you need any special permits or licences? Are there site rules that affect the way you will do the work?

1.3.2 Reading, Checking and Confirming Your Work Instructions

All work needs to follow worksite, environment and company safety procedures.

Procedures help to make sure that all work is done in a safe way, without damaging equipment or putting people in unsafe situations. They also help to make sure that work is done in the correct order and doesn't interrupt or get in the way of other work that is happening on the site.

Your work instructions will tell you the safest way to do the job, and the equipment that you will need to use. It is a good idea to check your work instructions with your boss or supervisor to make sure you know exactly what you need to do.

If you don't know where to get your instructions or you can't understand them, you can ask your boss or supervisor. They will tell you where to find your work instructions and explain what they mean.

Before starting work, you will need to confirm your work instructions with the appropriate personnel. This may include:

- Supervisor.
- Health and Safety Representative (HSR).
- Industry groups.

Make sure that prior to doing this you are sure of the specific information you will be confirming.

This is also a good opportunity to discuss with the relevant personnel any information you found to be unclear. They can explain how this information relates to your own work activities.

Confirming your work instructions will ensure that you know exactly what is expected of you, particularly when it comes to keeping the workplace safe for everyone on site.

1.3.3 Plans, Drawings and Sketches

Some of your work instructions might be given to you in drawings and sketches. You will need to get the information out of these and use it to do your job.

Project plans and drawings give you an overview of the site, for example:

- Location of the site and road maintenance in relation to the surrounding area.
- The position of structures, roads, access areas.
- Layout of drainage lines.
- Foundation details and landscaping features.

Depending on the project, drawings may be very detailed or they could be simple sketches.

You should learn about the conventions and symbols used in the plans and drawings so you can understand what the information means.

1.3.4 Organising Your Work Activities

After receiving and clarifying all of your work instructions and requirements, you will need to organise and plan for your work activities.

Organise your tasks in the most efficient way that still meets the requirements of the worksite. It will allow you to plan for the time ahead to ensure that project timelines are met and followed.

While you will be performing your own work activities you will also be involved with the activities of plant and machinery operators. This means you are required to sequence work activities and work with others on site concerning timing issues.

A Work Method Statement (WMS) is a list of steps that outlines how a job will be done. It also includes any hazards that occur at each step, and what you need to do about them. These statements can also be known as Safe Work Method Statement (SWMS), Job Safety Analysis (JSA) or Safe Operating Procedure (SOP).

Work method statements are a great tool for organising your work activities and making sure you have completed everything. This is because they outline the details of all tools, equipment and coordination with other workers relating to your job. Make sure all of these are available and ready before you start.

Flexibility is important when organising your work priorities to allow you to re-organise if:

- Higher priority tasks arise.
- Accidents occur.
- Weather interferes.
- There are unexpected conditions onsite.

1.3.5 Worksite Communications

It is important to coordinate your activities with other workers when you are planning for and carrying out the work to make sure everyone knows:

- The work being completed.
- How, when and where you will be operating.
- What they need to do.

All workers on site must understand their own role and the roles of others before starting work. It helps to make sure work is done safely and efficiently.

You will also need to alert personnel to any hazards you notice during your work activities, including changing work environments.

1.3.5.1 Communicating with Others

When communicating with others on site, make sure that you:

- Speak clearly and unambiguously – stick to the important details, don't waffle.
- Give instructions or directions so that they are easily understood.
- Provide complex information or explain issues to your listener in a way that ensures they understand. You could try breaking down the details, simplifying the information or referring to related examples.
- Listen carefully, answer questions and provide clarification as necessary. You can also ask questions to clarify understanding.
- Use all communications equipment appropriately, following the required procedures and protocols.

Communication equipment you might need to use includes:

- Two-way radios.
- Telephones.
- Written reports.
- Emails.
- Text messages.
- Other site-specific systems.

Make sure that you follow your site procedures and protocols for communicating on site. This may include using the correct communication processes for communicating work activities or exclusion zones.

Review Questions

3.	What details about the work area can you get from your work instructions?	☐

4.	When should you confirm your work instructions?	☐

5.	List three (3) examples of information that can be included in project plans and drawings.	☐

1.

2.

3.

6.	Why is flexibility important when organising your work?	☐

7.	Why is it important to coordinate with other personnel on site?	☐

8.	When communicating on site, what can you do to ensure understanding?	☐

1.4 Identify and Manage Risks and Hazards

Before you start work, you need to check for any hazards or risks in the area.

If you find a hazard or risk you need to do something to control it. By lowering or removing risks we can make hazards less dangerous. This will help to make the workplace safer.

1.4.1 Identify Hazards

Part of your job is to look around to see if you can find any hazards before you start any work. A **Hazard** is a thing or situation with the potential to cause 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:

- **Chemical hazards** – fuel, chemicals, contaminants, gases, dusts, hazardous substances or materials.
- **Environmental hazards** – adjoining walls, structures, unstable or uneven terrain, holes and pot holes, excavations, trenches both open and recently filled, cuttings, embankments, over-hanging rocks, trees, dust and noise, unstable faces or areas.
- **Working at heights or in confined spaces**.
- **Traffic conditions.**
- **Equipment in use or unattended** – vehicles, conveyors, fixed plant, overhead structures and services, abandoned equipment.
- **Material hazards** – hazardous materials and substances, or the lifting and manual handling issues around materials.
- **Overhead structures and services**.
- **People** – site workers, non-inducted personnel, site visitors, others authorised or unauthorised.
- **Installed services** – underground or above ground power lines, telephone lines, gas pipes, cables.
- **Structural hazards** – fences, facilities, buildings, other structures or obstructions, poles, traffic areas, work zones, out of area zones, access points bridges, through traffic bridges, buildings.
- **Weather conditions** – storms, heat, floods, fires, gas leaks, humidity.
- **Damaged or defective equipment** – could include pressurised hoses and fastenings, non-pressurised hoses, ancillary machinery equipment, vandalised equipment.

1.4.2 Assess Risks

Once you have identified the hazards on site or related to the work you will be doing you may be required to assess their risk level. A **Risk** is the chance of a hazard causing harm or damage.

Risk levels are worked out by looking at 2 factors:

Consequence	How bad will it be if the hazard causes harm?
Likelihood	What is the chance of the hazard causing harm?