RIICCM207E

Spread and Compact Materials

Learner Guide Instructions

Who is this document for?

The learner.

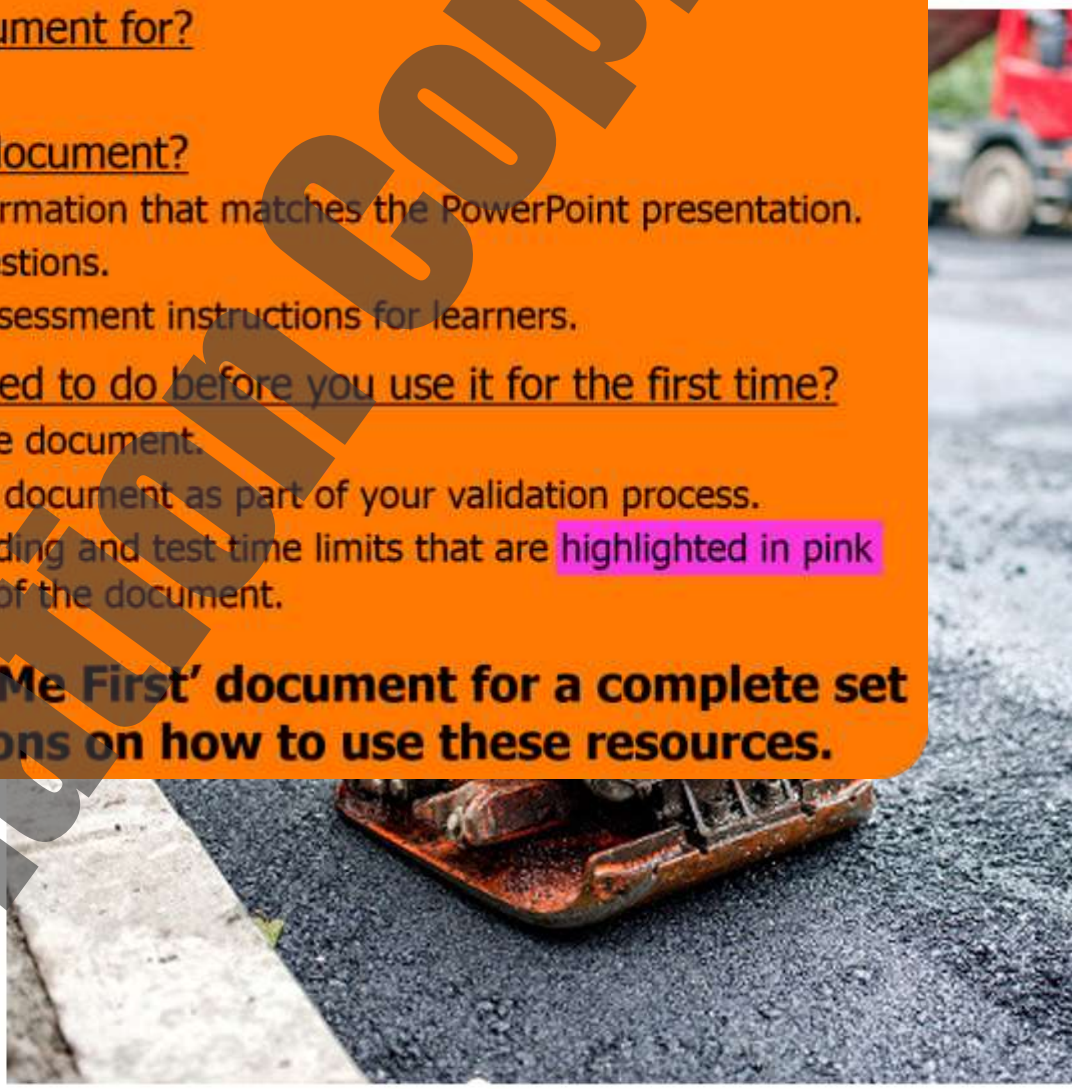
What is in this document?

- 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

RIICCM207E Spread and Compact Materials Manually

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.

Table of Contents

1.1 Introduction

This course is based on the unit of competency **RIICCM207E Spread and Compact Materials Manually.**

You will learn about:

- Planning and preparing tasks and activities.
- Checking compaction equipment before you use it.
- Spreading and compacting materials.
- Cleaning or assisting plant operators to clean an area.

1.2 Site Policies and Procedures

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 Access Site Policies and Procedures

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:

Site Details

The information and safety requirements of the workplace environment (where you will be working).

Hazard Details

Any hazards in the work area or related to the work. This could also include instructions on how to handle dangerous or hazardous materials.

Task Details

Instructions of what the work is or what you will be doing (this can include diagrams or plans). Also instructions on how to safely do the job.

Faulty Equipment Procedures

Isolation procedures to follow or forms to fill out.

Signage

Site signage tells you what equipment you need to have, or areas that are not safe to be in.

Emergency Procedures

Instructions on what to do in emergency situations, for example if there is a fire, accident or emergency where evacuation or first aid is needed.

Equipment and Work Instructions

Details of how to operate plant and equipment and the sequence of work to be done.

Environmental Protection

Environmental protection requirements listed in the Environmental Management Plan of the workplace environment (where you will be working).

Your worksite will also have instructions for working safely including:

- Handling hazardous materials.
- Safe operating procedures.
- Personal protective clothing and equipment.
- Safe use of tools and equipment.

1.2.2 Health & Safety Rules

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.

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

Rules and Laws	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.

Review Questions

1.	List 3 things that may be included in 'operations documentation':	☐

1.

2.

3.

2.	What are the four (4) types of laws and rules to keep everyone safe in the workplace?	☐

1.

2.

3.

4.

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 Following Work Instructions

When following your work instructions 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? 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 – What material needs to be spread and compacted? How much is there? Does it need any special equipment?
- Plant – What type of plant will be used? How big is it? How much room does it need?
- 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 and Checking 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.

1.3.2.1 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 earthworks 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.

1.3.3 Work Method Statements

Many worksites require a work method statement before any work can start. A work method statement 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).

1.3.4 Safety Data Sheets

A Safety Data Sheet (SDS) is a detailed document outlining the risks and hazards associated with handling chemicals and other materials.

The SDS will contain details that can help you to identify:

Basic Details of the Chemical or Material	Name, type and identification number.
Hazards Associated With the Material	Whether it is flammable or corrosive.
Safe Handling and Storage Procedures	PPE to use, sealed containers or storage temperatures.
Emergency Procedures	What to do if the chemical or material gets out of hand.
Disposal Procedures	Suggestions for removing the chemical or material from the site.

It will be supplied by the manufacturer and may or may not include material handling methods. It is important to always follow the instructions and advice in the SDS to avoid injuries or damage.

1.3.5 Identify and Locate Materials for Task

Depending on the specific task you may need to organise other materials to complete the job. Check the work plans for details about the work and the end result that is needed. You can confirm this with you supervisor.

Make sure that all materials are available for you to use as part of the planning process.

Check plans, drawings and specifications for details of:

- Type of materials required for the task.
- Quantities of materials required for the task.
- Compaction requirements.
- Drainage requirements.

Materials may already be present in the work area and simply need to be shifted into position. In other cases you may need items to be delivered to the work area. Speak with your supervisor before starting the work to organise these as it may impact on other works being completed in the area.

1.3.6 Project Quality Requirements

Every civil construction project will have quality requirements. These outline when tasks need to be completed and the required standard of the work.

Your work instructions and plans or drawings will guide you, and help you to make sure you are achieving the quality standard for the project.

They can include:

- Project dimensions.
- Project tolerances.
- Standards of work.
- Material standards.

Review Questions

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

4.	What 2 pieces of information may be found in project plans or drawings?	☐
1. 2.		

5.	What is a Work Method Statement?	☐

6.	What is a Safety Data Sheet?	☐

7.	What two (2) details about materials can be found in the work plans, drawings and specifications information?	☐

1.

2.

8.	What details are outlined in project quality requirements?	☐

1.4 Emergency Procedures

Emergency procedures are designed to keep everyone safe while they work. They are instructions on what to do in emergency situations, for example where evacuation or first aid is needed.

1.4.1 Following Emergency Procedures

Emergency procedures will vary depending upon the worksite. These procedures could include:

- Emergency shutdown.
- Evacuation.
- First aid.
- Fire fighting.

1.4.2 Emergency Shutdown of Equipment

If there is a fire, emergency or accident you might need to use the emergency stop on the equipment you are using. This will turn the equipment off immediately.

You can also use the emergency stop if the equipment stops working properly or you lose control of the equipment.

1.4.3 Evacuation

Things to remember are:

1. Keep calm.
2. Move away from the danger to a designated evacuation point, sometimes called an emergency assembly area.
3. Do not let other people into the area.
4. Call emergency services in accordance with workplace procedures and policies.

1.4.4 First Aid

First Aid is the quick care given to an injured or ill person. Every site will have a First Aid Officer. If somebody needs first aid you must tell your supervisor or First Aid Officer. Do not try to give first aid if you have not been trained.

1.4.5 Fire Fighting Equipment

Fire fighting equipment on site could be anything from small fire extinguishers through to large water cannons. Different fire fighting equipment should be used for different types of fire. Always check the equipment for information on what type of fire it can be used on.

Steps for using a fire extinguisher:

1. Evacuate the area.
2. Isolate the area.
3. Call emergency services or other designated on-site procedure.
4. If it is safe to do so, use an extinguisher to attempt to control the fire using the **PASS** system.

The **PASS** system:

P	**Pull** the pin.
A	**Aim** at the base of the fire.
S	**Squeeze** the trigger.
S	**Sweep** the base of the fire.

Contact your site emergency management team as soon as possible and call the fire brigade on 000.

Review Questions

9.	What emergency situations are generally outlined in site emergency procedures?	☐

1.5 Hazard Identification and Control

Before you start work, you need to check for any hazards or dangers in the area. If you find a hazard or danger you need to do something to control it. This will help to make the workplace safer.

1.5.1 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 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:

- Other workers, vehicles and equipment.
- Pedestrians and public vehicles in the area.
- Underground services.
- Unstable or difficult ground conditions.
- Poor visibility – can you see others? Can they see you?
- Defective tools and equipment.
- Manual handling risks.