

Support Plant Operations



LEARNER GUIDE

RIICCM206E S	upport Plant Operations
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1.1 Introduction

These materials cover the unit of competency RIICCM206E Support Plant Operations.



You will learn about:

- Planning and preparing tasks and activities.
- Identifying and protecting services.
- Supporting machinery operators.
- Conducting housekeeping tasks.

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:

Law	Description
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:

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.

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.

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Review Questions

1.	What are the four (4) types of health and safety laws and rules?	
1.		
2.		
3.		
4.		
2.	List three (3) things that may be included in 'operations documentation'.	
1.		
2.		
3.		

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 What work needs to be completed?
- Plant What type of plant will be used? How big is it? How much room does it need?
- Attachments What equipment will you need to shift the load safely? 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 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.

Organising work activities is about scheduling your tasks in the right order to complete all assigned tasks in the best, most efficient manner that meets worksite requirements.

As well as sorting out your own work tasks you may be required to organise the activities of plant and machinery operators.



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.

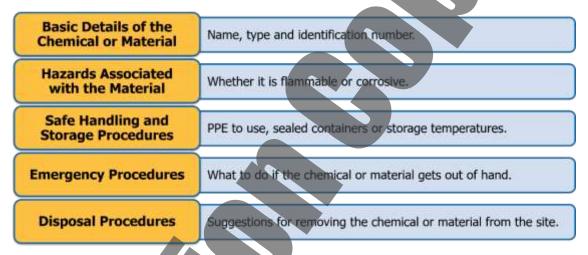
These statements can also be known as Safe Work Method Statement (SWMS), Job Safety Analysis (JSA) or Safe Operating Procedure (SOP).



1.3.4 Safety Data Sheets

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

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



It will be issued by the manufacturer and may or may not include material handling methods.

Talk to your WHS representative or supervisor if you have any questions about legislative requirements relating to your work.

1.3.5 Project Quality Requirements

All civil construction tasks and activities need to meet project quality requirements. These are based on project plans and specifications as well as client expectations.

Project quality requirements will detail exactly what you are expected to achieve and the standards you are expected to reach.

Project quality requirements may include:

- Dimensions and tolerances of tasks.
- Material standards.
- Work standards.
- Documentation requirements.
- Project specifications and drawings.
- Client standards.





It is essential that these requirements are known, understood and adhered to in all activities and tasks. To apply the requirements, you need to follow instructions and procedures exactly.

Speak with your supervisor or site quality officer if you are having any problems meeting the requirements.

1.3.5.1 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.
- Location of materials for storage and use.
- Environmental protection requirements.
- Schedules for the delivery of materials.



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 Emergency Procedures

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

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



1.3.6.1 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.

1.3.6.2 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.



1.3.6.3 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.

1.3.6.4 Fire Fighting Equipment

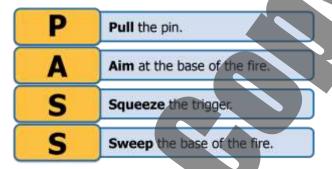
Fire fighting equipment on site could be anything from small fire extinguishers through to large water cannons. Different fire fighting equipment should be used for different types of fire. Always check the equipment for information on what type of fire it can be used on.

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:



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

Review Questions

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

4.	What information about the site might you find in project plans and o	drawings?	14
5.	What is a Work Method Statement?		Ш
6.	What is a Safety Data Sheet?		

7.	What details are outlined in project quality requirements?	
8.	What information about materials might you find in the work plans, drawings and specifications?	
9.	What emergency situations are generally outlined in site emergency procedures?	