LEARNER GUIDE

LLN READY

Self-propelled Compactor

TICKET

Training support material for:

RIIMPO316E

Conduct self-propelled compactor operations

Produced by:

EASY GUIDES Australia Pty Ltd

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Introduction to Self-propelled Compactor

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Introduction to self-propelled compactor

A self-propelled compactor is a self-propelled, tamping foot drum, wheeled machine, used to compact a variety of types of construction materials. It can operate at relatively high speeds and may have a dozer blade mounted on the front-end of the machine allowing for dozing, filling and compacting versatility. The tamping feet on the wheels of the machine may vary in size, shape and depth.

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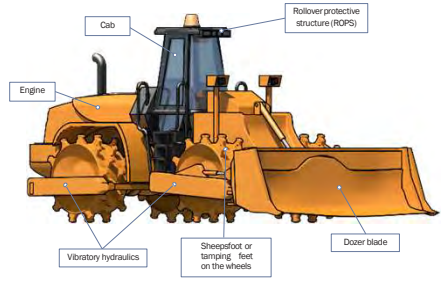
An example of a self-propelled compactor



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Self-propelled compactors

Four wheel (steel drum) articulated self-propelled compactor with dozer blade

Single sheepsfoot drum compactor

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Who has duty of care?

You have a duty of care. So does anyone who has something to do with the worksite.

Duty of care applies to:

Employers/persons conducting a business or undertaking (PCBU). This includes managers, manufacturers/suppliers, importers, designers, inspectors, etc.

Workers. This includes employees, contractors and sub-contractors, employees of labour hire companies, outworkers, volunteers, etc.

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Worker's duty of care

As a worker you must take care of your own health and safety – and the health and safety of others at the workplace. You must not put your own or other people's health and safety at risk.

Never work where you believe a hazard is a serious risk to your health and safety.

You must also:

- do your best to follow reasonable health and safety instructions from your boss (PCBU)
- follow workplace health and safety policies and procedures
- do not work where you believe a hazard would be a serious risk to your health and safety.

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PCBU/Employer's duty of care

The PCBU must:

- Provide a safe workplace
- Train workers and make sure they know what to do on the job
- Try to get rid of risks, or find ways to minimise risks
- Tell workers about any hazards or risks. Workers must know what to do in an emergency.
- Have a workplace safety plan. For example, workers should be trained in the use of fire fighting equipment and first aid equipment.

Penalties

If you are a PCBU/employer or a worker, the government can fine you or even imprison you for failing your duty of care.

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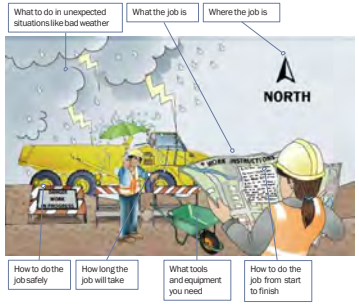
QUESTION 6

What do the job's work instructions explain?

Work instructions explain:



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QUESTION 7

What kinds of information do you need before starting work?

- Plans – what you need to do
- Specifications – rules and details about the job
- Operational details – how you will do the job
- Quality requirements of the job – the standards you are expected to meet.

QUESTION 8

When planning your job, why do you need to know what other people are doing on site?

- To make sure you will not get in the way of other jobs being done
- To make sure you know what others are doing near where you must work.

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QUESTION 9

What are the National Work Health (WHS) and Occupational Health and Safety (OHS) Acts about?

The Acts explain how to keep your workplace **safe** and **healthy**. They explain what you need to do to meet your duty of care.

For example:

You must make sure you do earthmoving work in a way that won't put yourself or others at risk. You must use earthmoving equipment according to instructions.

Note:
Check your state requirements as Acts may vary from state to state

QUESTION 10

You have a high risk work licence.

Under WHS/OHS laws, what are your responsibilities while working?

You must work in a way that is safe. You must not risk the health and safety of yourself or others.

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Worksite requirements

Examples of documents your employer should provide include:

- Safety plan for the site
- Emergency procedures, for example a site evacuation plan
- Environmental management plan for the job.

Emergency evacuation plan

Many worksites have an emergency evacuation plan which is displayed on the notice board.

You should make sure you know how to interpret this plan. For example, start by looking for a 'You are here' sticker on the plan drawing. Note how nearby areas are shown on the plan. Then work out where the emergency exit is – on the plan and in real life.

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QUESTION 11

The hierarchy of hazard control is a list of controls you can use to lower the danger from a hazard on the worksite.

What are the six (6) levels in the hierarchy of hazard control from the first choice to the last choice?

1. **Elimination:** If possible, remove (take away) the hazard.
2. **Substitution:** Use a safer method if you can't remove the hazard.
3. **Isolation:** Stop access to the hazardous (dangerous) area.

4. **Engineering Control Measures:** Change the tools, equipment or environment to make it safer.
5. **Administrative Practices:** Reduce the time the worker is exposed to the hazards by using training, job rotation, the timing of jobs, etc.

Memory aid: **E**very **S**aturday **I** **E**at **A** **P**ie

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Environmental management plan (EMP)

The environmental management plan (EMP) tells you important things about the environment at the worksite. It explains how the work you are doing could damage the environment. The possibility that you will cause this damage is called the environmental risk.

The EMP tells you what you must do so you do not damage the environment. It tells you how to work in a way that reduces damage to the environment.

The EMP also tells you how the worksite meets all environmental protection laws and what to do with waste.

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Earthmoving hazards and risks

The most common hazards and risks with earthmoving work are:

Falls from plant or machinery	Traffic and other mobile plant	Overhead or underground power
		
Underground gas lines	**Water and sewage piping**	**Rollovers**
		

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Earthmoving hazards and risks (continued)

Noise	Dust	Manual handling
		
Contaminated soil	**Falling into trenches or excavations**	**UV rays (radiation) from working in the sun**
		

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Decibel levels of common sounds

You must wear hearing protection when operating heavy equipment.

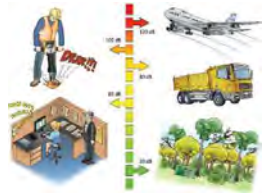
This is important because 8 hours of noise at 85 db (decibels), or noise levels of 140 db even briefly can permanently damage your hearing.

Hearing loss is:

- slow
- painless
- irreversible.

Here are some examples of levels of noise in different environments.

- A forest has about 20 db of noise
- In an office there might be around 60 db
- Standing outside a truck generates about 80 db
- A jackhammer generates around 100 db
- A jet taking off generates about 120 db



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Chemicals and solvents

Chemicals should always be labelled so that you can easily tell what chemical you are working with. Chemicals should be stored in a safe place where someone cannot accidentally come into contact with them.

Always check the Safety data sheet (SDS) before handling any chemicals.

The SDS must be provided to, and understood by, a person using chemicals in the workplace. The SDS will tell you how to safely handle the chemicals.

If you are not sure, put the chemicals in a safe, isolated area and talk to your supervisor.

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Safety around trenches

There is a risk that a person could fall into an open trench or excavation on a worksite. People working in trenches are at risk of being crushed or trapped if the trench caves in.

You must try to reduce this risk. Isolation is a good way to reduce the risk. You could put up para-webbing, barriers or temporary fencing. You may put trench shields with guard rails.

Trench shields and shoring

If a trench is 1.5 metres deep or more you **must** use trench shields or shoring. You should use trench shields that have approved lifting points.

The shields weight must be permanently marked on the shield. If the shield does not have its weight marked, it must be rigged by a licenced dogger or rigger. The shoring must meet Australian Standard 4744: Steel shoring and trench lining equipment. It must also come with an instruction manual. You should secure a ladder for workers to get in and out of the trench.

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Safety around trenches (continued)

Benching

Benching is where you cut levels in the soil to reduce the fall risk. For example, instead of having a single 2 metre trench, this area is excavated in two (2) levels. The first level is a 1 metre drop and is 3 metres wide. The second level is 1 metre × 1 metre.

Battering

Battering is where the edges of a trench are 'tapered' back on a gentle slope. Battering means that instead of a straight drop off, you have a more gentle slope. In this example, the drop off has been 'battered' back so the fall hazard is reduced.

Benching and battering reduce both the fall risk and the risk of collapse.

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