

# CPCCLHS3002

## Licence to Operate a 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

# CPCCLHS3002 Licence to Operate a Materials Hoist

<b>Learner Name:</b>	
<b>Learner ID:</b>	
<b>Learner Contact Number:</b>	
<b>Learner Email Address:</b>	
<b>Date Training Commenced:</b>	

## This Book Contains:

- Course Information.
- Review Questions.
- Practical Assessment overview and Instructions.

# Table of Contents

<b>1.1 Introduction</b>	<b>5</b>
1.1.1 What is a Materials Hoist?	5
1.1.2 When is a High Risk Licence Needed?	5
1.1.3 High Risk Work Licence Requirements	6
<b>1.2 Legislative Requirements</b>	<b>6</b>
1.2.1 Work Health and Safety Requirements	7
1.2.2 Duty of Care	7
Review Questions	8
<b>1.3 Workplace Requirements</b>	<b>9</b>
1.3.1 Work Method Statements	9
1.3.2 Manufacturer Documentation	10
Review Questions	10
<b>1.4 Gather Site Information and Plan Job</b>	<b>11</b>
1.4.1 Planning and Preparing for Materials Hoist Operations	11
1.4.1.1 Emergency Procedures	12
Review Questions	13
<b>1.5 Risk Management</b>	<b>13</b>
1.5.1 Hazard Identification	14
1.5.2 Risk Assessment	15
1.5.3 Risk Treatment	16
1.5.3.1 Personal Protective Clothing and Equipment	17
Review Questions	18
<b>1.6 Workplace Communications</b>	<b>20</b>
1.6.1 Identify Communication Methods	20
Review Questions	21
<b>2.1 Assess the Load</b>	<b>22</b>
2.1.1 Calculate Load Weights	22
2.1.2 Common Loads	24
2.1.3 Safe Movement of Materials	25
2.1.4 Determine the Hoist Capabilities	25
Review Questions	26
<b>2.2 Apply Hazard Controls</b>	<b>29</b>
2.2.1 Establish Hazard Control Measures	29
2.2.1.1 Protective Barriers and Fences	30
2.2.1.2 Lighting the Work Area	30
2.2.1.3 Working Near Pedestrians, Workers, Vehicles and Mobile Plant	30
Review Questions	31
<b>2.3 Access Hoist and Perform Routine Checks</b>	<b>32</b>
2.3.1 Safely Access Hoist	32
2.3.2 Check the Hoist and Equipment	32
2.3.3 Visually Checking the Hoist	33
2.3.4 Checking Signage and Labels	33
2.3.5 Conducting Pre-Operational Checks	33
2.3.5.1 Electrical System	35
2.3.5.2 Overhead Protection	35
2.3.5.3 Flexible Steel Wire Rope	36
2.3.5.4 Sheaves	36
2.3.5.5 Drums	37
2.3.6 Check the Hoist Service Logbook	37
2.3.7 Locate and Check All Controls	38
Review Questions	38

<b>2.4 Start the Hoist</b> .....	<b>41</b>
2.4.1 Conduct Operational Checks.....	42
2.4.2 Check All Hoist Safety Devices.....	42
2.4.2.1 Check Emergency Equipment.....	43
Review Questions.....	43
<b>2.5 Check Communication Equipment and Alarm Systems</b> .....	<b>44</b>
2.5.1 Checking Communication Equipment.....	44
2.5.2 Checking Alarm Systems.....	45
Review Questions.....	45
<b>2.6 Conducting a Test Run</b> .....	<b>45</b>
2.6.1 Test Run Checks.....	46
Review Questions.....	46
<b>2.7 Report and Record Equipment Faults</b> .....	<b>47</b>
2.7.1 Reporting Faults.....	47
Review Questions.....	47
<b>3.1 Operate the Hoist</b> .....	<b>48</b>
3.1.1 Hoist Operation Requirements.....	48
3.1.2 Transporting Dangerous/Hazardous Materials.....	49
3.1.3 Monitoring Weather Conditions.....	49
3.1.4 Using Communication Methods.....	49
3.1.5 Monitoring the Load.....	50
3.1.6 Monitoring Hoist Movement.....	50
Review Questions.....	50
<b>3.2 Unplanned and Unsafe Situations</b> .....	<b>52</b>
3.2.1 Responding to Unsafe Situations and Emergencies.....	52
3.2.2 Emergency Brake and Descent System.....	54
3.2.3 First Aid.....	54
3.2.4 Fire Fighting.....	54
3.2.5 Report All Hazards, Incidents and Injuries.....	55
Review Questions.....	55
<b>3.3 Conclude Operations</b> .....	<b>57</b>
3.3.1 Shutting Down the Hoist.....	57
Review Questions.....	58
<b>3.4 Conduct Post-Operational Checks</b> .....	<b>58</b>
3.4.1 Inspect, Maintain and Store Tools and Equipment.....	58
3.4.2 Recording and Reporting Damage and Defects.....	59
3.4.3 Completing Records.....	59
Review Questions.....	60
<b>Practical Assessment Instructions</b> .....	<b>67</b>
Conditions of Assessment.....	67
Protective Personal Equipment (PPE) Requirements.....	67
Grounds for stopping the assessment.....	67
Achieving a Satisfactory Outcome.....	67
Practical Assessments.....	68

# 1.1 Introduction



This training course is based on the National High Risk Licence Unit of Competency **CPCCLHS3002 Licence to Operate a Materials Hoist.**

You will learn about:

- ◆ Planning the job.
- ◆ Selecting and inspecting equipment.
- ◆ Preparing the site and equipment.
- ◆ Using the materials hoist.
- ◆ Shutting down the job.

## 1.1.1 What is a Materials Hoist?

A materials hoist is a type of builder's hoist with which goods or materials may be raised or lowered. Workers are **NOT** allowed to ride in a materials hoist.

A materials hoist has a car, bucket or platform which is cantilevered from, and travels up and down the outside face of a support structure.



## 1.1.2 When is a High Risk Licence Needed?



A high risk work licence allows you to lawfully work with certain high risk equipment and plant such as forklifts, cranes, hoists, elevating work platforms, scaffolding, rigging and pressure equipment.

This course covers the skills and knowledge required to safely operate a materials hoist, that is, a hoist consisting of a car, bucket or platform cantilevered from and travelling up and down the external face of the support of a structure, which is used for hoisting goods and materials but not persons.

Competence in this unit does not in itself result in a licence. A licence is obtained after competence is assessed under applicable Commonwealth, state or territory work health and safety (WHS) regulations.

### 1.1.3 High Risk Work Licence Requirements

Once you pass your assessment you will have **60 days** to apply for your licence.

You must renew your licence within 12 months of its expiry otherwise:

- ◆ Your licence can't be renewed.
- ◆ You need to repeat the course and re-apply for your licence.
- ◆ You need to enrol in the course again and be supervised by somebody who has a current licence for the same class.

You can still do high risk work without a licence as long as:

- ◆ You are enrolled in a high risk course for the class, and
- ◆ You are being supervised by somebody who has a licence for the same class.



As part of their legal duty of care, licensed workers must take reasonable steps to make sure the way they work does not impact on the safety of themselves or any others on site. Failing to work safely can result in the health and safety regulator:

- ◆ Suspending or cancelling your licence.
- ◆ Refusing to renew your licence.
- ◆ Ordering that you are reassessed to ensure you are competent.

Your employer should ask you for evidence that you have a high risk licence before you start any high risk work. You can show them:

- ◆ Your licence.
- ◆ Proof from the training company that you have passed your assessment.
- ◆ Proof that you are currently completing a course for high risk work.



### 1.2 Legislative Requirements

It is important that you are aware of legislative requirements relating to your work. Before you begin your tasks ensure that you access the relevant documentation.

Requirements relating to your work may include:

- ◆ Work Health and Safety (WHS) requirements.
- ◆ Duty of care.



## 1.2.1 Work Health and Safety Requirements

Work Health & Safety (WHS) laws and guidelines help keep your workplace safe.

These can be broken down into four main types:

Law	Description
<b>Acts</b>	Laws to protect the health, safety and welfare of people at work.
<b>Regulations</b>	Gives more details or information on particular parts of the Act.
<b>Codes of Practice</b>	Are practical instructions on how to meet the terms of the Law.
<b>Australian Standards</b>	Give you the minimum levels of performance or quality for a hazard, work process or product.

## 1.2.2 Duty of Care

All personnel have a legal responsibility under duty of care to do everything reasonably practicable to protect others from harm by complying with safe work practices.

This includes activities that require licences, tickets or certificates of competency or any other relevant state and territory WHS requirements.



Duty of care involves:

- ◆ Employers and self-employed persons.
- ◆ Persons in control of the workplace.
- ◆ Supervisors.
- ◆ Designers.
- ◆ Manufacturers.
- ◆ Suppliers.
- ◆ Workers.
- ◆ Inspectors.



## Review Questions

1.

What are the four (4) main types of WHS legislation/requirements?



1.

2.

3.

4.

2.

List three (3) people who have a duty of care responsibility.



1.

2.

3.



## 1.3 Workplace Requirements

Each workplace or worksite has a series of requirements, rules and procedures that need to be followed to help ensure the safety of everyone on and around the site.

These requirements and procedures may be different from site to site so it is very important that you determine the rules for the site when you arrive.

Before you start any work you need to consult with authorised personnel such as:

- ◆ Supervisors.
- ◆ Safety officers.
- ◆ Other hoist operators.
- ◆ Riggers.
- ◆ Maintenance personnel.
- ◆ Other personnel.
- ◆ Site engineers (if applicable).
- ◆ Site or operations managers.



These people can tell you about any workplace hazards and give you important information to make sure you can follow workplace policies and procedures.

### 1.3.1 Work Method Statements

A Work Method Statement (WMS) details how specific hazards and risks, related to a high risk construction task will be managed. It is developed by the employer for their employees.

Work Method Statements fulfill a number of objectives:

- ◆ They outline a safe method of work for a specific job.
- ◆ They provide an induction document that workers must read and understand before starting the job.
- ◆ They assist in meeting legal responsibilities for the risk management process, hazard identification, risk assessment and risk control.
- ◆ They assist in effectively coordinating the work, the materials required, the time required and the people involved to achieve a safe and efficient outcome.
- ◆ They are a quality assurance tool.



Work Method Statements may also be referred to as Safe Work Method Statements (SWMS), Safe Work Procedures (SWP) or Job Safety Analysis (JSA).

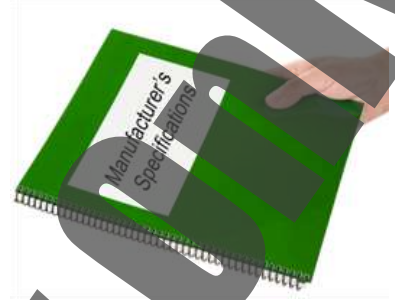
A Work Method Statement Template can be found in **Appendix A**.

### 1.3.2 Manufacturer Documentation

All the equipment and tools that are used to operate a materials hoist will have manufacturer documentation, also called manufacturer instructions.

This documentation may include:

- ◆ Instructions for assembly and use.
- ◆ Maintenance schedules.
- ◆ End of use guidelines.
- ◆ Known hazards or risks.
- ◆ Important contact details for repairs or enquiries.



It is important that you follow the guidance provided in manufacturer documentation as this will ensure all tools and equipment are being used safely. Reviewing this documentation is an important part of meeting WHS responsibilities.

Not following guidance given in the manufacturer's instructions can lead to unsafe work practices which could lead to illness, injury or in some cases death.

Manufacturer's instructions are often referred to when conducting a risk assessment, or training personnel on how to use a new tool or install a piece of equipment. If you are not sure where to locate these documents, ask your supervisor or manager.

### Review Questions

<b>3.</b>	What is a Work Method Statement?	<input type="checkbox"/>
<b>4.</b>	List two (2) examples of documentation you may find in manufacturer guidelines.	<input type="checkbox"/>
1.		
2.		

## 1.4 Gather Site Information and Plan Job

Planning the job before you start is an important step in any high risk work. You need to plan and be well prepared for hoist operations to ensure each task is completed safely and to a high standard.

You also need to obtain the relevant site information and relate it to your work activities.



### 1.4.1 Planning and Preparing for Materials Hoist Operations

Before beginning a job remember to consider:

- ◆ Job or Task Requirements – Think about everything the job involves including:
  - ◆ Communication methods to be used during the job.
  - ◆ Safe access and egress from the work area.
  - ◆ The location and specifics of the job.
  - ◆ The equipment that you will need.
  - ◆ The capacity and capabilities of the hoist to do the job.
- ◆ Priorities or Sequencing – Break the entire job into tasks and put them in a logical order. When prioritising the tasks make sure you consider what tasks need to be completed before others can begin.
- ◆ Site Rules and Regulations – Find out and understand any regulations or site rules that affect your job. If you are unsure about any rules or regulations, speak to your supervisor.
- ◆ Permits and Procedures – Find out if you need a permit to complete this job. If so you need to ensure that you have one and that it is current. If you have any questions about permits talk to your supervisor. You also need to understand and apply any site procedures that are in place for this task. Procedures outline the steps you need to follow for:
  - ◆ Emergency response.
  - ◆ Incident and accident reporting.
  - ◆ Equipment fault reports.
  - ◆ Equipment maintenance requirements.
  - ◆ Supervision requirements.
- ◆ Site Information - Talk to associated personnel such as your supervisor to clarify site information and make sure you have all the details required to carry out the job safely. This will include checking:
  - ◆ Work Method Statements (WMS).
  - ◆ Safety data sheets (SDSs).
  - ◆ Work schedules.
  - ◆ Manufacturer's instructions for plant and equipment use.

**Risk Management** – This involves managing any risks or hazards that are present throughout the worksite and in relation to your task.





All work must be in keeping with safety standards and workplace rules to ensure the safety of all workers.

Review your task instructions, relevant permits or procedures and site information carefully and if you have any questions speak to your supervisor.

### 1.4.1.1 Emergency Procedures

Before undertaking any kind of high risk work you must make sure you are familiar with the relevant emergency procedures. Operating a hoist can be extremely dangerous if you are not prepared, not using the correct safety equipment, or if you make a mistake. Knowing how to respond quickly in an emergency situation may be the difference between a full recovery and serious injury.

Emergency procedures should include common workplace emergencies such as:

- ◆ Fire.
- ◆ Gas leak.
- ◆ Injuries and the administration of first aid.
- ◆ Flood.
- ◆ Structural collapse.
- ◆ Vehicular collisions.
- ◆ Unexpected or severe weather conditions.



You will also find details of how to respond to each type of emergency including:



- ◆ The responsibilities of specific personnel.
- ◆ The location of emergency response equipment.
- ◆ Who must be notified, how and what details need to be provided.
- ◆ Areas to gather.
- ◆ Areas to be avoided.

There may be additional safety or emergency requirements specific to the work conditions including:

- ◆ Working at night.
- ◆ Working near or above public areas.

Review all emergency procedures before starting any work and speak with your supervisor if anything is unclear or you feel something has been overlooked or is unsafe in any way.



## Review Questions

5.

List three (3) things you need to consider before beginning a job?



1.

2.

3.

6.

When reviewing emergency procedures, who do you need to speak to if anything is unclear or you feel something has been overlooked or is unsafe?



## 1.5 Risk Management

Before starting any work it is important to manage any hazards or risks in the area, or related to the task.

A **Hazard** is a thing or situation with the potential to cause harm or damage.

A **Risk** is the chance of a hazard causing harm or damage.

By minimising or removing risks we can make hazards less dangerous.

Controlling a hazard can be a team effort and it's important that everybody knows what they need to do and how or if they need to change their work process to suit.



Make sure you talk to the right people. This can include:

- ◆ Safety officers.
- ◆ Site engineers (where applicable).
- ◆ Supervisors.
- ◆ Colleagues.



Managers who are authorised to take responsibility for the workplace or operations.

These people may have information about site hazards. It is important to communicate with other personnel and safety officers before starting on a worksite to ensure that any workplace policies or site-specific procedures are followed.

## 1.5.1 Hazard Identification



Part of your job is to look around to see if you can find any hazards before you start any work.

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. Remember there may be hazards above you such as falling objects.
- ◆ All around you **at eye level**. Look around to see if there is anything in the way of where you want to move the load/hoist.
- ◆ **Down low** on the ground (also think about what is under the ground). Humps and bumps, slippery surfaces and rubbish can all be dangerous.

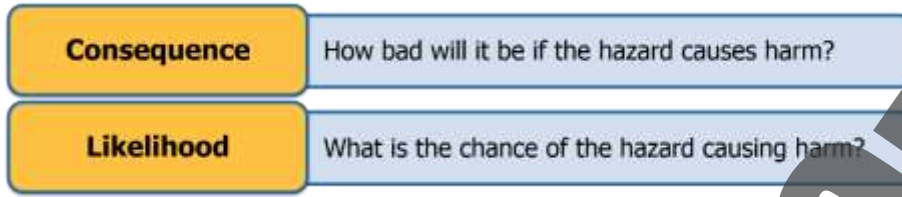
Common workplace hazards related to materials hoist operations include:

- ◆ Power lines.
- ◆ Overhead service lines or pipes.
- ◆ Personnel working near the hoist.
- ◆ Bad weather conditions such as dangerously strong winds, lightning or rain.
- ◆ Insufficient lighting/lack of illumination.
- ◆ Pedestrian and vehicle traffic.
- ◆ Other plant and equipment.
- ◆ Ground conditions (e.g. condition of pavements).
- ◆ Landings access.
- ◆ Platform gates.
- ◆ Obstructions.
- ◆ Dangerous/hazardous materials.
- ◆ Other tasks being performed in the workplace.
- ◆ Hoist overload.
- ◆ Electrical hazards.
- ◆ Hazardous manual tasks.
- ◆ Damaged or poor-quality equipment.
- ◆ Falling objects.
- ◆ Falls from heights.



## 1.5.2 Risk Assessment

Once you have identified the hazards on site or related to the work you will be doing you need to assess their risk level. Risk levels are worked out by looking at 2 factors:



You can use a table like the one shown here to work out the risk level:

Likelihood	Consequence				
	1. Insignificant	2. Minor First Aid Required	3. Moderate Medical Attention and Time Off Work	4. Major Long Term Illness or Serious Injury	5. Catastrophic Kill or Cause Permanent Disability or Illness
1. Rare	Low	Low	Moderate	Moderate	Moderate
2. Unlikely	Low	Low	Moderate	Moderate	High
3. Possible	Low	Moderate	High	High	Extreme
4. Likely	Moderate	Moderate	High	High	Extreme
5. Almost Certain	Moderate	High	High	Extreme	Extreme

For example, a hazard that has a **Major** consequence and is **Almost Certain** to occur has a risk level of **Extreme**.

Likelihood	Consequence				
	1. Insignificant	2. Minor First Aid Required	3. Moderate Medical Attention and Time Off Work	4. Major Long Term Illness or Serious Injury	5. Catastrophic Kill or Cause Permanent Disability or Illness
1. Rare	Low	Low	Moderate	Moderate	Moderate
2. Unlikely	Low	Low	Moderate	Moderate	High
3. Possible	Low	Moderate	High	High	Extreme
4. Likely	Moderate	Moderate	High	High	Extreme
5. Almost Certain	Moderate	High	High	<b>Extreme</b>	Extreme

The risk level will help you to work out what kind of action needs to be taken, and how soon you need to act.