

Work Health Safety Officer Construction Elective Assessment

Marking Guide

For Trainer / Assessor Use ONLY

Notes regarding the marking guide:

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- The following marking guide is provided for assessors information only, this information is not intended for the candidate.
 - This guide is provided to assist in making assessment decisions and to increase consistency amongst assessors.
 - The answers provided within the marking guide are a guide and assessors should consider each individual candidate answer.
 - Competence in this unit requires the candidate successfully completes all activities. Candidates are entitled to two (2) re assessments for any question, activity or the entire assessment. It is the assessor's responsibility to work with the candidate and assist them with any additional training that maybe required following an assessment, to ensure that they are prepared for reassessment.
 - Competency based assessment does not use a marking scale rather the candidate is deemed competent or not yet competent. Candidates deemed not yet competent are given additional opportunities to demonstrate competency.
 - Satisfactory demonstration of all activities is required before competency is achieved for the unit.
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Assessment Activity 1 - Questions

Instructions to the Assessor

The following questions are to be answered by the candidate on a separate sheet of paper. The length of the answer for each question is indicated. All answers need to cover the key points. In the event that the candidate does not cover all of the key points you need to seek further information from the candidate.

- 1.1 List three (3) things a person conducting a business or undertaking (PCBU) must consider when positioning or having installed any type of 'Plant' in the workplace.

Answers include:

1. *Make sure that there is a safe access to plant for operation, cleaning maintenance, inspection*
2. *That the plant does not obstruct doorways and emergency exits,*
3. *That the plant rests on a suitable foundation*
4. *Ventilation of Plant emissions such as mists, fumes or dust is appropriate*
5. *Any rise in Plant temperature is controlled*
6. *Workers and other are exposed to minimum noise levels*
7. *Area is well lit*

- 1.2 List three (3) things a worker must do to ensure the safe and correct operation of 'Plant'.

Answers include:

1. *Use and maintain Plant in accordance with the employer's instructions.*
2. *Take reasonable care for other people's safety.*
3. *Inform employer, principal contractor or person in control of your workplace of any faults in the plant.*
4. *Use Personal Protective Equipment in accordance with the employer's instructions on its correct use with regard to Plant.*

- 1.3 What section of the Scaffolding Code of Practice 2009 covers mobile scaffolding?

Answer: s7.1.3 (Mobile Scaffold)

- 1.4 When is a licence required to erect a mobile scaffold? Include the Regulation or Code of Practice reference in your answer.

*Answer: When there is a risk that a person or thing may fall more than 4 metres
Reference: WH&S Regulation Schedule 19 (definition of scaffolding work) and
Schedule 3 (high risk work licences) and COP – Scaffolding Section 2.1*

- 1.5 According to the Tower Crane Code of Practice and the Electrical safety Code of Practice – Working near overhead and underground electric lines, what are the two basic options for minimising risk that could be taken when operating a **Mobile Crane** or **Tower Crane** in close proximity to overhead power lines?

Answers include:

- 1. Have Power Lines de-energised*
- 2. Stay outside Exclusion zones*
- 3. Spotter*

Reference: Tower Crane - Code of Practice s4.1, COP – Working near exposed live parts.

- 1.6 What are three (3) requirements that must be met if a person is to be suspended by a crane in a workbox? (*Refer Cranes, Hoists and Lifting Gear - Student Notes*)

Answers include:

- 1. One person must be a dogger (not more than 3 persons)*
- 2. Each person must be attached to the workbox by lanyard & harness*
- 3. Crane must be fitted with a safety hook*

- 1.7 When inspecting steel wire rope or slings what are five (5) things you should look for? (*Refer Cranes, Hoists and Lifting Gear - Student Notes*)

Answers include:

- 1. Corrosion*
- 2. Kinks*
- 3. Crushed/flattened sections*
- 4. Bird caging & high standing*
- 5. Damaged thimbles*
- 6. Damaged splices*
- 7. Stretching*

8. 33% wear on individual wires
9. 1 broken wire near socket end 2 Dia
10. Adjacent broken wires
11. Heat damage

1.8 What are two (2) 'rules' or safe work practices associated with the use of ladders?
(Refer Ladders – Student Notes)

Answers include:

1. Adequately supported at the base
2. Never walked by the person standing on the ladder
3. Set at a slope of 4 in 1
4. One person at a time
5. 3 points of contact when climbing
6. No climbing above the third rung from the top
7. Slip resistant footwear

1.9 According to the Ladders – Student Notes, what Australian Standard would you refer to for designing a 'fixed ladder' for use to access the top of a water tank?

Answer: AS 1657

1.10 What are three (3) potential hazards of pressure equipment?
(Refer Pressure Equipment – Student Notes)

Answers include:

1. Poor manufacture of equipment
2. Improper installation & commissioning procedures & practices
3. Poor design of the workplace
4. Poor maintenance & repair of equipment
5. Improper dismantling & transportation process
6. Improper alterations to the equipment
7. Failure of alarm & shut down systems

1.11 Where would you find the recommended inspection period on a steam pressure vessel? (Refer Pressure Equipment – Student Notes)

Answer: Table 4.1 located in AS3788.

1.12 What Australian Standard would you refer to for the inspection and test requirements including acceptance and rejection criteria of a Gas Cylinder? (Refer Pressure Equipment – Student Notes)

Answer: AS2337.1

- 1.13 Referring to the Electrical Safety Regulations, what are the electrical testing requirements for electrical equipment that is 'hired out'?

Answer:

1. *Inspect prior to each hire by a competent person*
2. *Inspected and tagged by a competent person at least once every 6 months*

Refer Electrical Safety Regulation s126

- 1.14 What must PSBU's and workers do to ensure electrical safety of specified electrical equipment in the workplace with regard to **Service** and **Office work**?

Answers include:

1. *Cords to be protected from damage (Section 85 of Qld ESR),*
2. *Test & tag by competent person, or*
3. *RCD*

- 1.15 Abrasive Blasting is a *Potentially Hazardous Process*. Name three (3) hazards associated with abrasive blasting and provide a control measure for each.

Sample Answers:

1. *Silica Dust: Respiratory protection*
2. *Noise: Hearing protection*
3. *Particulate matter: Respiratory protection, protective clothing, eye protection...*
4. *Static Electricity: Earth strap*

- 1.16 Where should welding work be performed to provide extra protection from electric shock?

Sample answer:

On a dry insulated floor. Wooden platforms, rubber mats or dry areas provide extra protection, especially in confined spaces.

- 1.17 What are three (3) items of Personal Protective Equipment (PPE) that should be worn when welding?

Answers include:

1. *Gloves*
2. *Overalls*
3. *Safety Footwear*
4. *Aprons*
5. *Head Covering – Helmets and Masks*

- 1.18 At what height is a fall protection system required for construction work?

Answer: 2.0 Metres

1.19 Referring to the WHS Regulations, what are the three (3) regulatory levels of control measures to help protect persons when working at heights?

Answers:

1. *Provide a fall prevention device e.g. Erecting physical barrier*
2. *Providing work positioning system e.g. travel restraint system*
3. *Fall arrest system e.g. Measures to 'catch' a person– harness, net.*

Ref: WHS Regulation s79

1.20 Referring to the WHS Regulations, list two (2) Regulatory Controls when using a forklift (Industrial Lift Truck).

Sample Answers:

1. *Do not carry passengers unless fitted with a proper seat*
2. *Ensure Seat is fitted with a suitable restraint*
3. *Lifting attachment suitable for load*

Ref: Reg s218

1.21 According to the Confined Spaces Code of Practice, what is the role of a standby person?

Sample answer:

- *understand the nature of the hazards inside the particular confined space and be able to recognise signs and symptoms that workers in the confined space may experience*
- *remain outside the confined space and do no other work which may interfere with their primary role of monitoring the workers inside the space*
- *have all required rescue equipment (e.g. safety harnesses, lifting equipment, a lifeline) immediately available*
- *have the authority to order workers to exit the space if any hazardous situation arises*
- *never enter the space to attempt rescue.*

1.22 What are three (3) things that must be considered in a Risk Assessment for **Confined Space**?

Answers may include:

- *Whether it is necessary to enter the confined space to conduct the work*
- *The Nature of the confined space*
- *Whether a change in the concentration of airborne contaminants could occur*
- *The work required to be done, including*
 - a. *The range of methods by which the work can be done*
 - b. *The proposed method of working (including plant to be used)*
- *The hazards involved and associated risks*
- *Emergency and rescue procedures*

Ref: WHS Regulation s 66

1.23 What are the two (2) maximum exposure levels for noise?

Answer:

- *85 dBA – Average daily (8 hour)*
- *140 dBC – Peak*

Ref: WHS Regulation s56

1.24 List 2 actions a PCBU can take to reduce the risk of hearing loss?

Answers include:

- *Provide appropriate PPE*
- *Buy quiet*
- *Acoustic panels*
- *Separate by Distance*

Ref: COP – Managing Noise and Preventing hearing Loss at Work - Section 5

1.25 Name three (3) control measures associated with scaffold **working platforms**.

Answers include:

- *Slip resistant*
- *Not cracked or split*
- *Uniform thickness*
- *Captive*
- *< 25mm gaps (50mm total)*
- *Prevented from uplift*

Ref: COP – Scaffolding Section 5.7

1.26 What type of **licence** is required to perform **scaffolding work** in relation to *modular or prefabricated scaffolds*?

Answer:

Basic Scaffolding licence

Ref: WHS Regulation Schedule 3 – Definition Scaffolding Work

- 1.27 Name a reference document to provide assistance in the use of explosive power tools?

Answer: Plant Code of Practice and AS1873

- 1.28 Name two (2) hazards and suitable controls associated with formwork?

Sample answers:

Hazards: Work at height, noise, dust, manual tasks, sun

Controls: PPE – Eye protection, hearing protection, edge protection

- 1.29 According to the Formwork Code of Practice, what are three (3) things that can increase the wind load on formwork?

Sample answers:

- *Size of form*
- *Wind speed*
- *Wind direction*
- *Nature of form*
- *Wind resistance*

Ref: Code of Practice for Formwork s2.2.1

- 1.30 Are Concrete Pumps required to be registered with the Work Health and Safety Queensland - Yes or No? Quote the references in the Regulation.

Answer: Yes,

References: WHS Regulation Schedule 5 - Sec 1.9 and 3.7

- 1.31 Referring to the Concrete Pumping Code of Practice, list four (4) hazards associated with the Operation of Concrete Pumps.

Answers include:

- *Overhead power lines*
- *Manual tasks*
- *High line pressures*
- *Moving paddles in hopper*
- *Moving vehicles and booms*

- 1.32 List two (2) conditions under which the lifting of pre-cast elements over workers can be performed.

Answers include:

- *Effective backup lifting system employed and engineer certified*
- *Not in windy conditions*
- *Kept to a minimum etc.*

Reference: COP for Tilt-up and Pre-cast Construction – s13.2

1.33 What are four (4) hazards associated with tilt up constructions?

Answers include:

- *Crane usage*
- *Mobile plant and equipment*
- *Lifting and bracing points inadequate*
- *Inadequate concrete strength*
- *Work at height*
- *Site features*
- *Weather (wind)*

1.34 Where would you find information about **safety in welding**?

Answers include:

- *AS1674.2 Part 2 Electrical & Health & Safety in Welding – Technical Note 7*
- *Supplier of consumables*

1.35 According to the Steel Construction Code of Practice, who are three (3) obligation holders in respect to steel construction work?

Answers include:

- *Designers*
- *PC's*
- *Fabrication*
- *Erectors*
- *Workers*

COP s2.5 to 2.8 and Appendix 4

1.36 What is the legislative definition of 'Demolition work' ?

Demolition work means:

- *To demolish or dismantle a structure, or part of a structure that is load bearing or otherwise related to the physical integrity of the structure.
(But does not include formwork/falsework etc. or power/light/telecommunication poles)*

Ref: WHS Regulation Schedule 19

- 1.37 How many days' **notice** to the Regulator are required for **Demolition Work** involving a 10m high building? What is the legislative reference?

Answer: 5 days

Reference: WHS Regulation s142

- 1.38 Referring to the Demolition Code of Practice, what are two (2) methods for protecting members of the public from debris as a result of demolition works?

Sample answers:

- *Separate by barrier/distance*
- *Shading or screening*

- 1.39 Is Asbestos Removal considered *High Risk Construction Work*? State the legislative reference.

Answer:

Yes –

Ref: WHS Reg s291

- 1.40 In what Code of Practice would you find information regarding asbestos removal work? What are three (3) of the WHS duties regarding the removal of asbestos?

How to safely remove Asbestos Code of Practice 2011

Answers include:

- *ensuring an asbestos removal supervisor is readily available or present when the work is being carried out (**Regulation 459**)*
- *providing appropriate training and ensuring the asbestos removal worker has undertaken the relevant units of competencies associated with the asbestos removal (**Regulation 460-461**)*
- *telling various parties about the asbestos removal and providing them with appropriate information (**Regulation 462 and Regulation 467- 468**)*
- *obtaining the workplace's asbestos register (**Regulation 463**)*
- *preparing an asbestos removal control plan (**Regulation 464 - 465**)*

- 1.41 Who is responsible for the preparation of a WHS Management Plan for a Construction Project and quote the section of the Regulation?

Answer: Principal Contractor

Ref: Reg s309 (1)

- 1.42 When is a **Safe Work Method Statement** required for Excavation Work? Provide references from the WHS Regulation?

Answer: When construction work is performed in or near a shaft or trench with an excavated depth > 1.5m. (This is then high risk construction work).

Ref: WHS Regulation s291 (g) (i) and s299 (1)

1.44 Is construction work performed in or near a **Tunnel**, considered to be **High Risk Construction Work**. State the legislative reference.

Answer:

- Yes

Reference: WHS Regulation s291 (g) (ii)

1.45 When is **General Induction Construction Training** required?

Answer:

- Before a worker performs “construction Work” and if they have not performed “construction Work” for 2 years since they last successfully completed general construction induction training.

Reference: WHS Regulation Part 6.5 s316

Assessment Activity 2 - Case Study

Instructions to the candidate

Using the forms provided:

1. Identify and prioritise the hazards associated with the listed plant
2. Complete the reports in accordance with best practice
3. Make recommendations from the findings of the inspection report
4. Consult with (and list) all the relevant parties regarding the compliance issues relating to the statutory requirements
5. Detail the appropriate control measures
6. Describe how you would monitor and review the effectiveness of the control measures

Case study

You are the Work Health and Safety Officer of a Construction company. Your largest stock order of the year has just arrived and is to be unloaded into the indoor storage area, behind the staff meals room. The storage area is poorly ventilated, however, the forklift is electric. There is no signage restricting entry into this area. The truck is parked in the car park, which is open to public access. The reverse beeper of the forklift has been disabled, as it disturbs the staff in the meals room. The driver of the truck is operating the company's forklift.

Risk management plan – multiple hazards

Business name	Completed by
Business location	Date completed
Work area	Scheduled review date

Identify the hazard	Assess the risk	Control the risk					
What is the hazard?	What might go wrong? Who might be harmed and how?	Priority or risk level (low, med, high) *	What else do you need to do to control the risk? Include any resources required such as legislation, codes of practice or Australian standards	Action by whom?	Action by when?	How will the effectiveness of the control measure be monitored?	Date completed
<i>Example:</i> <i>Unguarded dough mixer</i>	<i>Bakers could accidentally put hands in operating bowl and be cut or have finger amputated</i>	<i>Medium</i>	<i>Install interlocking guard on mixer</i> <i>Plant Code of Practice</i>	<i>J. Smith</i>	<i>13/7/18</i>	<i>Periodic reviews to ensure staff comply with proper operating procedures</i>	<i>02/7/18</i>
1. Unloading truck in the car park.	1. Collision with motor vehicles/pedestrians. 2. Competency of truck driver to operate forklift. 3. Damage to property or stock whilst loading the forklift.	Medium	Designate a clear zone for the truck and forklift to operate within with caution signage erected to alert pedestrians and vehicles. Sight truck driver's licence to operate forklift and provide competency assessment prior	Driver Driver	Immediate Immediate	Periodic reviews to ensure staff comply with proper operating procedures	

			to use / or provide qualified internal driver to unload truck. Develop a Forklift Operation procedure (which includes storage) and train staff in it AS2359 – Industrial Trucks wh&s Regulation	Operators	1 month		
Carting stock to storage area.	1. As above. 2. The load shifting during transit.	Medium	Shrink wrap the pallets to prevent movement during transit	Supplier	1 month		
3. Unloading the pallets from the forklift into the store.	Damage to stock whilst unloading forklift. Collapse of stock due to incorrect stacking.	Medium	Limit stacking height to four pallets. Signage Provide a storage racking system within the store to prevent collapse of stock	Operator Store Personnel PCBU	Immediate 1 Week 1 week	Monitor staff compliance with stacking procedures Regularly inspect stacking system to ensure integrity of racking system	

4. Returning to the truck within the car park.	1. Collision with pedestrians and vehicles which may be due to high speed.	Medium	Redesign the store by providing a designated loading bay separated from the public areas. Speed limit Forklift Provide fish eye mirrors to ensure visibility of vehicles / pedestrians when exiting the store AS2359 – Industrial Trucks WHS Regulation	Hotel management Forklift Manufacturer Hotel management	1 year 1 year 1 month		.
5. Poor ventilation and heat within the store.	Heat stress	High	Exhaust or extraction fans to remove hot air	PCBU	1 month	Monitor heat within the store to ensure effectiveness of control	

How to manage work health and safety risks

Use this information to help you complete the risk management table on the front of this form. This information is sourced from the *How to manage work health and safety risks Code of Practice 2011*. You can view the full code at worksafe.qld.gov.au.

Step 1

Identify hazards

Identify the things or situations that could potentially cause harm to people.

How to identify hazards

Try a number of ways, including:

Inspecting the workplace

- Consulting workers, directly or through surveys, representatives, etc.
- Information from industry bodies, regulators and specialists, etc.
- Reading instruction manuals or safety data sheets
- Reviewing your records of incident reports, complaints, health monitoring, etc.

Where to look

Look in all aspects of work, including:

- the physical work environment
- equipment, materials and substances used
- work tasks and how they are performed
- work design and management (e.g. shift work)

Step 2

Assess hazards

Consider *what* could happen if someone is exposed to a hazard and how *likely* that is.

Level of risk

Work out the level of risk by considering the possible severity injury and likelihood of it occurring.

The level of risk will increase as the likelihood and severity increase.

Severity

How severe could the harm be? Consider what type of injuries may happen, who it affects, if it could escalate, etc.

Likelihood

Work out the likelihood of harm occurring. You can estimate it by considering:

- How often is the task done? Does this make the harm more or less likely?
- How close do people get to the hazard?
- Has it ever happened before, either in your workplace or somewhere else? How often?

Consider if the harm is: certain to occur, very likely, possible, unlikely or rare.

Step 3

Control hazards

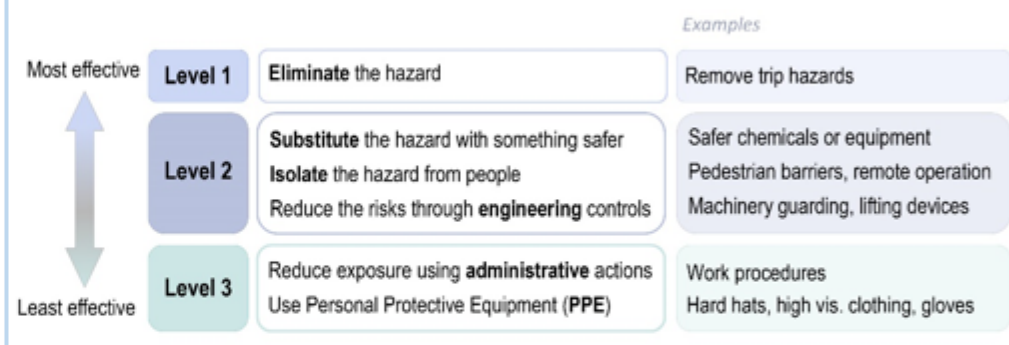
Try to eliminate the risk first, or if that is not possible, put controls in place that minimise the risk so far as is reasonably practicable.

Finding the best control

You can rank ways of controlling risks from the highest level of protection and reliability to the lowest. This ranking is known as the *hierarchy of risk control* (see below).

Always start at the most effective control (level 1, elimination), and work down the hierarchy.

The hierarchy of risk control



Step 4

Review controls

Reviews will help you identify if your controls become less effective.

Regular reviews

The control measures that you put in place should be reviewed regularly to make sure they work as planned. Don't wait until something goes wrong.

If you find problems, go back through the risk management steps, review your information and make further decisions about risk control.

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