Australian Government

CPCCDE3016A Identify hazards on demolition sites and apply risk management strategies

Release 1

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

CPCCDE3016A Identify hazards on demolition sites and apply risk management strategies

Modification History

New unit.
This version first released with CPC08 Construction, Plumbing and Services Training Package Version 9.

Unit Descriptor

This unit of competency specifies the outcomes required to identify hazards common to demolition work, as well as undiscovered hazards that may arise during the course of work on demolition sites; and to assess risks and apply risk management strategies according to compliance and workplace requirements.
Demolition hazards include those relating to:

- demolition work health and safety (WHS)
- public health and safety
- contamination of the environment.

Application of the Unit

This unit of competency supports the induction procedure for specialist demolition workers before beginning work on site. Specialist demolition workers dismantle and demolish public, residential, commercial and industrial buildings and structures of all types, including chemical processing plants, and process the resulting materials for salvage, recycling and waste disposal.
This unit does not replace requirements for completion of construction work health and safety units.

Licensing/Regulatory Information

Licensing, legislative, regulatory or certification requirements apply to demolition work in different States and Territories. Candidates are advised to consult with the relevant regulatory authorities.

Pre-Requisites

CPCCOHS2001A	Apply OHS requirements, policies and procedures in the construction industry

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Review site characteristics and work plans.	1.1	Issues relating to the age and integrity of buildings and structures, and construction methods and materials used, are identified and applied to review of potential risks.
		1.2	Approved demolition plan and safe work method statements (SWMS) are reviewed and information relating to hazards and risk management strategies is applied to participation in job briefing according to work role requirements.
		1.3	Job roles and responsibilities for people involved in the project are identified and clarified according to workplace procedures.
2	Apply WHS risk management strategies to work activities on demolition sites.	2.1	***Hazards that may cause trips, falls or falling objects*** are identified and risk management strategies applied according to compliance, site and workplace requirements.
		2.2	Hazards relating to ***hazardous substances*** are identified and risk management strategies applied according to compliance, site and workplace requirements.
		2.3	Hazards relating to ***structural composition and integrity of structures*** are identified and risk management strategies applied according to compliance, site and workplace requirements.

		2.4 Hazards relating to ***services*** are identified and risk management strategies applied according to compliance, site and workplace requirements.
		2.5 Hazards relating to the use of mobile and static plant, tools and equipment are identified and risk management strategies applied according to compliance, site and workplace requirements.
		2.6 Hazards relating to the use of high reach excavators are identified and risk management strategies applied according to compliance, site and workplace requirements.
		2.7 Hazards relating to noise, dust and vibrations are identified and risk management strategies applied according to compliance, site and workplace requirements.
		2.8 ***Hazards that may cause fire or explosions*** are identified and risk management strategies applied according to compliance, site and workplace requirements.
		2.9 Work site is monitored during demolition process for signs of ***undiscovered hazards*** and risk management strategies are applied according to compliance, site and workplace requirements.
		2.10 WHS hazards and incidents are reported according to compliance, site and workplace requirements.
3	Apply public health and safety risk management strategies on demolition sites.	3.1 Site boundaries and exclusion zones are identified and strategies to prevent access by unauthorised persons are implemented according to compliance, site and workplace requirements.
		3.2 Site traffic access and egress points and pedestrian and vehicle routes are identified and traffic management plan is applied according to compliance, site and workplace requirements.
		3.3 Demolition activities with potential to cause dust, noise and vibrations are identified and risk management strategies are applied according to compliance, site and workplace requirements.
		3.4 Demolition activities resulting in falling structures or flying debris or with potential to affect structural

			integrity of adjoining buildings are identified and risk management strategies applied according to compliance, site and workplace requirements.
		3.5	Public health and safety hazards and incidents are reported according to compliance, site and workplace requirements.
4	Apply environmental risk management strategies on demolition sites.	4.1	Opportunities to maximise environmentally sound use of energy and water are identified and strategies applied according to environmental compliance, site and workplace requirements.
		4.2	Potential risks to air quality resulting from demolition work are identified and risk management strategies applied according to environmental compliance, site and workplace requirements.
		4.3	Potential risks associated with ***stormwater management*** are identified and risk management strategies applied according to environmental compliance, site and workplace requirements.
		4.4	Potential risks to groundwater and groundwater monitoring wells are identified and risk management strategies applied according to environmental compliance, site and workplace requirements.
		4.5	Potential risks to the environment resulting from removing and handling hazardous substances and waste materials are identified and risk management strategies applied according to environmental compliance, site and workplace requirements.
		4.6	Environmental hazards and incidents are reported according to environmental compliance, site and workplace requirements.
5	Contribute to improvement of demolition risk management strategies.	5.1	Demolition methods, procedures and risk management strategies are reviewed and discussed with team members to develop ideas for improvements in risk management according to workplace procedures.
		5.2	Industry professional development activities relating to demolition risk management are undertaken as required, according to workplace requirements.

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- learning skills to:
  - evaluate own actions and make judgements about performance and necessary improvements
  - recognise signs indicating undiscovered or unpredicted hazards on a demolition site, for example buried asbestos
  - respond to change, such as differences in work site environmental and sustainability requirements
- numeracy skills to:
  - interpret scales on demolition plans and drawings
  - measure site boundaries and exclusion zones
- oral communication skills to:
  - enable clear and direct communication, using questioning to identify and confirm requirements, and share information
  - report risks and hazards on the work site, including faults in tools, equipment and materials
  - use language and concepts appropriate to cultural differences
- reading skills to:
  - interpret documentation, including drawings and specifications
  - understand written instructions, procedures and signage
- writing skills to complete simple equipment fault forms

Required knowledge

- demolition methods and procedures
- general construction terminology
- hazards occurring and risk management strategies used on demolition sites
- types of plant, tools and equipment applicable to demolition tasks, and:
  - applications of each tool or piece of equipment
  - maintenance requirements
  - safe methods of operation for different demolition tasks

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

This unit of competency could be assessed in the workplace by observation of the identification of hazards on demolition sites and the application of risk management strategies.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

A person should demonstrate the ability to:

- locate, interpret and apply information, standards and specifications relevant to the identification of hazards and application of risk management strategies on demolition sites
- comply with site safety plan and the requirements of WHS legislation, regulations and codes of practice applicable to workplace operations
- comply with organisational policies and procedures and quality requirements
- communicate and work effectively and safely with others
- follow work instructions, operating procedures and inspection practices to identify hazards and apply risk management strategies on demolition sites.

Context of and specific resources for assessment

Assessment of this unit:

- must be in the context of the work environment
- must meet relevant compliance requirements.

Resource implications for assessment include:

- realistic tasks covering the mandatory task requirements
- relevant specifications and work instructions
- support materials appropriate to activity
- workplace instructions relating to safe work practices and addressing hazards and emergencies
- information relevant to each task, such as safety data sheets.

Method of assessment

Assessment for this unit must verify the practical application of the required skills and knowledge, using a combination of the following methods:

- direct observation of tasks in real work conditions
- questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- review of relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

Guidance information for assessment

This unit could be assessed on its own or in combination with other units relevant to the job function.

Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.

Assessment processes and techniques should, as far as is practical, take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance**.** ***Bold italicised*** wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Hazards that may cause trips, falls or falling objects must include:

- equipment failure
- movement of loads
- partial demolition of building elements
- pits
- plant, tools and equipment and associated cables, hoses and lines
- penetrations:
  - floor
  - roof
  - wall
- stacked or stored debris, materials and waste
- structural instability of building
- uncleared rubble and accumulated loads on suspended slabs
- working at heights.

Hazardous substances must include:

- asbestos
- flammable or toxic residues in pipework and storage tanks
- lead-based paints
- ozone depleting substances
- polychlorinated biphenyls (PCBs)
- silica.

Structural composition and integrity of

- effect of fire on hazardous materials
- fire-damaged structures

structures must include:

- load-bearing ability of structural elements due to build-up of demolition debris
- partially demolished building elements with sharp protrusions
- pre- and post-tensioned concrete structures
- precast components
- ruinous structures
- severely corroded, deteriorated or degraded structures
- special structures
- termite damaged structures.

Services:

- must include:
  - air
  - chemical product (fuel)
  - electricity
  - electrical distribution assets
  - gas
  - hydraulic
  - services specific to manufacturing processes
  - steam
  - telecommunications
  - wastewater
  - water
- may be:
  - overhead
  - underground
  - disconnected
  - live:
    - services adjacent to demolition site
    - services required during demolition process
  - located within structural elements
  - temporary
  - undocumented:
    - extensions
    - relocations.

Hazards that may cause fire or explosions are:

- chemical-containing drums
- dust, including coal, flour, wheat and sugar
- hot work
- flammable residues in pipework and storage tanks
- pressurised containers:
  - fire extinguishers
  - gas cylinders

	• hydraulic accumulators • underground storage tanks.
Undiscovered hazards may include but are not limited to:	• asbestos • biological waste, including animal faeces • chemicals • contaminated soils • process waste • syringes • termite damage • underground storage tanks.
Stormwater management may include:	• contamination • discharge from site • sediment control.

Unit Sector(s)

Demolition

Custom Content Section

Not applicable.