Australian Government

Department of Education, Employment and Workplace Relations

CPCCDE3015A Remove friable asbestos

Release: 1

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Modification History

New to CPC08
Replaces unit CPCCDE3012A Encapsulate and remove asbestos
Not equivalent

Unit Descriptor

This unit of competency specifies the outcomes required to remove friable asbestos containing material (ACM). The unit includes preparing, enclosing and removing friable ACM, and includes knowledge of decontamination and disposal requirements.

Application of the Unit

Site location for work may be either domestic or commercial, and may be a demolition site, a new work site or an existing structure being renovated, extended, restored or maintained. Project sites may be construction sites and may also include ships, soils in relation to the friable asbestos removal process, and fences.

Licensing/Regulatory Information

Occupational licenses are required nationally.
Work must be completed according to relevant legislative, industry, customer and organisational requirements, including work health and safety (WHS) policies and procedures.
Regulatory mechanisms apply to this unit. This unit is required for all ACM removal workers engaged in the removal of friable ACM. Candidates are advised to check for regulatory requirements.

Pre-Requisites

CPCCOHS1001A	Work safely 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 performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Prepare for asbestos removal.	1.1	Work instructions and asbestos removal control plan (ARCP) are obtained and ***information*** is confirmed and applied for preparation purposes.
		1.2	***Safety*** requirements and data gathered from an on-site assessment, an asbestos register where available, and other information sources are used to prepare for a safe and compliant removal process.
		1.3	Required quantity of ***materials*** is calculated according to plans, specifications and ***quality requirements***.
		1.4	***Environmental requirements*** are identified for the project according to environmental plans, and regulatory obligations are applied.
		1.5	Processes required to meet health surveillance requirements are undertaken and contributions to air monitoring are made in line with level of authority and responsibility.
		1.6	***Preparation*** for the removal process is finalised and authorised obtained according to legislative and company requirements and the ARCP.
		1.7	***Plant, equipment*** and ***personal protective equipment*** (PPE) consistent with job requirements are selected to carry out tasks, checked for serviceability, and faults are rectified or reported prior to commencement.

2	Prepare asbestos removal area and removal site.	2.1	***Friable asbestos containing materials*** to be removed are identified, asbestos register is checked, and clarification sought from supervisor as required according to workplace procedures.
		2.2	Signage and barricade requirements are identified and implemented to delineate the work area from the site area.
		2.3	Decontamination unit is positioned and assembled to manufacturer requirements.
		2.4	Services are connected to decontamination unit according to regulatory requirements and codes of practice.
		2.5	Decontamination procedure is tested within scope of own responsibility and according to workplace procedures and the ARCP.
		2.6	Materials and equipment required for removal of ACM from ***project sites*** are identified, checked and prepared for operation.
		2.7	Processes are undertaken to ensure the safety of the site, including ensuring where necessary that ***utilities*** are deactivated, contained, diverted or secured prior to commencing work.
		2.8	Occupants, neighbours and other affected parties are notified according to legislation and the code of practice and within scope of own responsibility.
3	Enclose removal site.	3.1	***Requirements to enclose the removal site*** safely to prevent the further release of fibres are followed according to the ARCP and legislative and company requirements.
		3.2	Types of enclosures, impact of the size of the removal on the methodology selected, and types and use of ***removal processes*** are identified.
		3.3	Contribution is made within limits of responsibility to ensure negative air pressure is maintained within the enclosure in line with legislative requirements, and enclosure is inspected and smoke tested for air tightness.

		3.4	Notification of proposed asbestos removal is provided to the licensed assessor within required timeframe and limits of own responsibility.
4	Carry out asbestos removal process.	4.1	***Asbestos is removed from work site*** and work area using ***safe work methods*** and according to ARCP, regulatory requirements and codes of practice.
		4.2	Removed ***asbestos is contained*** and placed into double-lined removal bags or bins, sealed, labelled and removed from site according to regulatory requirements and the ARCP.
		4.3	Manual-handling principles for bagged and sealed ACM are used wherever possible to prevent breakages of plastic.
5	Carry out decontamination process.	5.1	Decontamination unit is used according to manufacturer and regulatory requirements and codes of practice.
		5.2	Decontamination of the work area is carried out according to workplace procedures, ARCP and regulatory requirements.
		5.3	***Decontamination of asbestos removal workers is carried out*** according to workplace procedures, ARCP and regulatory requirements.
		5.4	Approval to dismantle asbestos removal and decontamination equipment is gained according to regulatory requirements and codes of practice.
		5.5	Asbestos removal and decontamination equipment is removed from the area according to the ARCP and regulatory requirements, and following clearance from the licensed asbestos assessor.
6	Clean up work site.	6.1	Work area is cleared and materials disposed of according to legislation, regulations, codes of practice and job specification.
		6.2	Plant, tools and equipment are cleaned, checked, maintained and stored according to manufacturer recommendations and standard work practices.

		6.3	Work area is inspected for asbestos dust and debris to ensure compliance prior to a clearance inspection.
7	Contribute to and use documentation in line with regulatory requirements.	7.1	Contribution is made within limits of own responsibility to the preparation and use of ***documentation*** for regulatory notification processes, according to legislative and company requirements.
		7.2	Steps are taken within limits of own responsibility to ensure clearance inspection requirements are met and clearance certificate is gained.
		7.3	Contribution is made within limits of own responsibility to the preparation and use of an emergency plan and according to legislative and company requirements.
		7.4	Contribution is made within limits of own responsibility to the preparation and use of a certified safety management systems (SMS) according to legislative and company requirements.

Required Skills and Knowledge

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

Required skills

- communication and appropriate level of language skills to:
  - determine requirements
  - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
  - follow instructions
  - read and apply:
    - documentation from a variety of sources
    - drawings and specifications
  - use language and concepts appropriate to cultural differences
- initiative and enterprise skills to:
  - evaluate own actions and make judgements about performance and necessary improvements
  - identify and report faults in tools, equipment and materials
- planning and organising skills to:
  - plan and set out work
  - recognise procedures, follow instructions and contribute to workplace responsibilities, such as current environmental and safety systems and the ARCP
- teamwork skills to:
  - coordinate own work with others to action tasks
  - relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities
- self-management skills to:
  - work independently and in teams to read and interpret relevant documentation and to plan friable asbestos removal tasks according to the recommended safe work method
  - set up the asbestos removal area according to the safe work method
  - apply general WHS requirements and construction safety requirements, including applying safe work methods for the removal of friable asbestos
  - follow correct cleaning, decontamination and disposal procedures
  - use, fit and maintain PPE, decontamination equipment, and hand and power tools safely

Required knowledge

- range of materials manufactured using asbestos, the type and characteristics of asbestos used in each material, the usual applications associated with the material

- methods and purpose for assessing hazards relating to friable ACM, together with an understanding of:
  - health effects caused by exposure to ACM and requirement for safe handling and removal
  - health impacts on the community and requirement for safe handling and disposal
- decontamination techniques
- general WHS procedures for construction work
- health hazards associated with friable ACM, such as:
  - weathering
  - wear and tear
  - application of tools and equipment
  - accidental damage
- licensing requirements for the use of specific equipment, such as excavators
- hazards associated with using enclosures and removing friable asbestos
- requirements of current legislation and standards relating to asbestos safety, and the decontamination and disposal of asbestos waste
- general construction terminology
- handling requirements of differing types of asbestos materials
- work site and work area procedures
- job safety analysis (JSA) and safe work method statements (SWMS) if required for construction
- safety data sheets (SDS)
- materials storage and hazardous waste management
- method of operation, and cleaning, use and maintenance requirements of equipment
- demolition plant and equipment as applicable to asbestos removal only
- plans, drawings and specifications, asbestos registers and register amendments
- quality requirements relating to the removal of friable asbestos
- risk assessment processes and contingency planning relating to the removal of friable asbestos
- techniques associated with enclosing and removing asbestos, including:
  - use of large and small-scale enclosures for different sites
  - use of negative pressure exhaust units
  - encapsulation methods prior to removal
- types, characteristics, uses and limitations of plant and equipment involved in removing asbestos
- workplace and equipment safety requirements
- application of the documentation for notification; and use of ARCP, clearance inspections, visual and air-monitoring processes and clearance certificates
- use of certified WHS management system and emergency plan

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 or a close simulation of the workplace environment, providing that simulated or project-based assessment techniques fully replicate workplace conditions, materials, activities, responsibilities and procedures.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person should demonstrate the ability to: • obtain and apply work instructions for the safe and correct removal of friable asbestos • set up the work area and test equipment for use in the removal process of friable asbestos • isolate the site prior to removal, complying with regulatory requirements • remove friable asbestos safely, complying with regulatory requirements • contain the asbestos containing material and ensure its handling and disposal are safe and comply with requirements • decontaminate self, work equipment and work site safely and correctly • complete documentation that supports the removal process within limits of own responsibility.
Context of and specific resources for assessment	This unit is to be assessed using standard and authorised work practices, safety requirements and environmental constraints. Assessment of essential underpinning knowledge will usually be conducted in an off-site context. Assessment is to comply with relevant regulatory or Australian standards' requirements. Resource implications for assessment include: • an induction procedure and requirement • realistic tasks or simulated tasks covering the mandatory task requirements • relevant specifications and work instructions • tools and equipment appropriate to applying safe work practices • support materials appropriate to activity • workplace instructions relating to safe work practices and addressing hazards and emergencies • research resources, including industry-related systems

	information • safety data sheets. 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.
Method of assessment	Assessment methods must: • satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Training Package • include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application • reinforce the integration of employability skills with workplace tasks and job roles • confirm that competency is verified and able to be transferred to other circumstances and environments. Validity and sufficiency of evidence requires that: • competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace • where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge • all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence. 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. Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

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.

Information to ensure the safe and correct completion of the job may include:	• ARCP
	• licensed asbestos assessor's report
	• asbestos register
	• company policies and procedures, including:
	  • accessing toilets and other amenities
	  • managing work hours to minimise risk from tiredness
	  • working in heat and avoiding heat stress
	• operating manuals and specifications for materials and equipment
	• SWMS or JSA for construction as required
	• diagrams or sketches
	• instructions issued by authorised organisational or external personnel
	• manufacturer specifications and instructions, where specified
	• SDS
	• regulatory and legislative requirements for enclosing and removing asbestos
	• relevant Australian standards and codes
	• safe work procedures relating to enclosing and removing asbestos
	• memos, verbal and written instructions, and diagrams
	• work bulletins
	• work schedules, plans and specifications.

Safety procedures are to be according to state and territory legislation and regulations and project safety plan, and may include:	• emergency procedures, including extinguishing fires and evacuation • handling activities that may require the assistance of others or the use of manual or mechanical lifting devices where size, weight or other issues, such as a disability, are a factor • hazard control • hazardous materials and substances • organisational first aid requirements • PPE prescribed under legislation, regulations and workplace policies and practices • safe operating procedures according to WHS management system, including the conduct of operational risk assessment and treatments associated with:

	• deactivating or securing utilities, including electrical, air conditioning and water services • earth leakage boxes • falling objects • lighting • plant movement • power cables, including overhead service trays, cables and conduits • restricted access barriers • surrounding structures • traffic control • trip hazards • work site visitors and the public • working at heights • working in confined spaces • working in proximity to others • use of firefighting equipment • use of tools and equipment • workplace environmental requirements and safety.
Materials may include:	• acrylic paint to seal ACM • approved and branded or labelled plastic bags • duct tape • foam infill spray • gaffer tape • plastic sheeting • polyvinyl alcohol (PVA) adhesive as spray / spray tack glue • rags or other material wipes • heavy-duty polythene bags (200 μm minimum thickness) • 200 μm unused (not recycled) plastic sheeting or drop sheet • signs • timber frames, nails, aluminium poles and other materials required for enclosures • glove bag material.
Quality requirements may include:	• internal company quality policy and standards • manufacturer specifications • relevant regulations, including Australian standards • workplace operations and procedures.
Environmental requirements must fully reflect legislation and the Code of Practice for the	• clean-up management • dust and noise management • sedimentation control • vibration management

Safe Removal of Asbestos, including:	• waste management, including the safe disposal of asbestos containing materials, including waste water from decontamination unit (DCU).
Preparation may include:	• assessing conditions and hazards • determining work requirements, and safety plans and policies • identifying equipment defects • identifying, preparing for enclosing, and removing asbestos from a work site according to an ARCP work site inspection.
Plant and equipment may require separate licensing for use and may include:	• high efficiency particulate air (HEPA) vacuum cleaners to comply with AS3544-1988 and AS4260-1997 as amended from time to time • anchorage points for the enclosure • negative air pressure enclosures or bubbles • enclosure equipment • atomiser and water bottles (not pressurised) • barricades, including barricade tape, para-webbing, hoarding or fencing • bars (crow and pinch) • decontamination unit and remote decontamination unit • decontamination facilities • excavators • hammers • ladders to comply with construction regulations if required • hoses and spray fittings • flame retardant polythene • hardboard / corex • scaffolds • scrapers • shovels and spades • smoke-testing equipment • static lines.

Personal protective equipment will be specified to the requirements of the job and may include:	• protective clothing, such as:
	  • disposable coveralls with fitted hood and cuffs
	  • safety footwear (pull-on, not lace-up)
	  • protective eye wear, such as safety glasses
	  • full body safety harness
	  • disposable protective gloves
	• correct respiratory protection class P3, full face respirators and airline respirators for negative air enclosures
	• correct face fitting and use of respiratory protective equipment (RPE)
	• spare sets of PPE.

Friable asbestos containing materials are easily crumbled or reduced to powder by hand, and may include:	• asbestos backing on vinyl flooring
	• material in degraded condition that has rendered the material friable, including:
	  • asbestos cement
	  • asbestos cement moulded guttering
	  • asbestos cement sheets
	  • corrugated asbestos cement roofing sheets in degraded condition
	• asbestos in matrix of sprayed vermiculite
	• low density board
	• sprayed on fireproofing, soundproofing and thermal insulation
	• acoustic plaster soundproofing
	• thermal insulation
	• gaskets that have become friable
	• sealants that have become friable
	• pipe lagging
	• woven textiles, ropes, tapes and braids
	• decorative coatings.

Project sites may include:	• residential, commercial, industrial and public buildings • plant, equipment and fire boards (e.g. friction plant and gaskets) • demolition sites • fences • ships and other forms of transport • sites for new building development.
Utilities may include:	• air conditioning • electricity • water services.

Requirements to enclose the removal site:	• will reflect the nature of the site and must comply with legislative and company requirements
	• may include the use of:
	  • negative pressure exhaust units to prevent the escape of asbestos fibres from contained asbestos work areas
	  • enclosures for large-scale asbestos removal work, including:
	  • design and installation considerations
	  • testing of enclosures
	  • decontamination
	  • mini-enclosures for small-scale asbestos removal work
	  • glove bag and wrap and cut removal method
	  • decontamination unit

	• waste water and filtration or handling unit.
Removal processes may include the following methods:	• dry • wet • saturation.

Asbestos is removed from work site in a manner that complies with legislative and company requirements, and may include:	• wet method, including:
	  • saturate material by gently spraying with water and surfactant mixture (PVA in water ratio of 5:1)
	  • remove materials in sections with the minimum amount of cutting and separation, using hand tools as appropriate
	  • place removed sections in appropriate containers or packaging
	  • **Note:** The application of the wet asbestos removal method requires the disconnection of the building's power supply and use of a temporary power source fitted with earth leakage and residual current device (RCD)
	• dry method if required due to electrical safety issue
	• saturation method.

Safe work methods may include:	• compliant set-up of the asbestos work area, including set-up of negative air, lighting, water and emergency supplies • placing adequate signage around friable asbestos work site • fire and emergency system requirements • enclosure of the asbestos removal area and the plant, equipment and fixtures remaining in the area • testing the asbestos enclosure in the work area • procedures for entering and leaving the enclosure in the asbestos work area • safe techniques for removing friable asbestos • packaging and removing contaminated plant, tools and equipment • cleaning and decontaminating tools, equipment and the asbestos work area • decontaminating and demobilising the asbestos work site • final decontamination of personnel • disposing of asbestos waste.
Asbestos is contained and sealed before removing from the work area and work site using a range of techniques, including:	• double-bagging • using heavy-duty polythene bags (200 μm minimum thickness) labelled with an appropriate warning • using drums or bins in good condition with well-fitting lids labelled with appropriate warning signs or labels • mini enclosures, such as glove bag and wrap and cut methods (suitable for friable ACM removal from small areas).

	Notes: • For larger-scale disposal, the supplier of a waste removal bin must be informed of the usage to ensure appropriate and legal disposal. • If too large for a bin or bag, a skip or vehicle tray may be used provided it is double-lined with heavy-duty thick plastic sheeting. When ACMs are loaded on a truck tray the ACMs must be wetted down and then fully wrapped and sealed with a layer of 200 μm sheeting or bagged. Labelling must occur.
Decontamination of asbestos removal workers is carried out using:	• 'buddy' vacuuming • decontamination unit for large non-friable removals in certain circumstances • wet wiping.
Documentation may include:	• ARCP • air-monitoring plans for control air monitoring • air-monitoring results • asbestos register • notification of asbestos removal work to the regulator • clearance certificates • knowledge of the procedures in the certified SMS • emergency plan development • equipment test certificates • health-monitoring program • RPE face fits • competency training certificates.

Unit Sector(s)

Construction

Custom Content Section

Not applicable.