Australian Government

Department of Education, Employment and Workplace Relations

CPCCBC5014A Conduct asbestos assessment associated with removal

Release: 1

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Modification History

New to CPC08
Replaces unit CPCCBC4023A Plan and undertake site inspection and assessment of asbestos products and materials
Not equivalent

Unit Descriptor

This unit of competency specifies the outcomes required for assessors to visually inspect and use a range of measuring devices to undertake the monitoring of airborne asbestos fibres in the workplace as an integral part of identifying hazards, assessing risks, monitoring the effectiveness of controls, and ensuring that the workplace is free of asbestos fibres prior to reoccupation.
The unit includes the planning of the monitoring process, the selection and use of processes and air-monitoring equipment, the conduct of the assessment process, and the proper handling and interpretation of results.
Asbestos assessment and air monitoring are required during all friable (Class A) asbestos removal and for non-friable asbestos removal where a risk assessment indicates that airborne asbestos fibres may result from the removal activity.

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 and fences.

Licensing/Regulatory Information

Occupational licenses are required nationally.
Work must be completed according to relevant legislative, code of practice, industry, customer and organisational requirements, including work health and safety (WHS) policies and procedures. Testing must conform to National Association of Testing Authorities (NATA) or other accredited laboratory requirements and standards.
Regulatory mechanisms apply to this unit. 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	Plan for assessment process of asbestos removal.	1.1	Scope, timelines and budget for the project are negotiated with the client and asbestos removalist or supervisor.
		1.2	***Type of asbestos containing material*** (ACM), its location, friability and condition are identified by reference to the asbestos register and consultation with workplace personnel and client.
		1.3	***Legislation, regulations, code of practice and standards*** are researched and confirmed to inform the planning process, identify risk and ensure a compliant and ***independent assessment*** process.
		1.4	Required reports are identified and undertaken in a timely manner and according to the requirements of the specific audience and the legislation, regulations, code of practice and standards.
		1.5	***Characteristics*** of and health impacts from exposure to ACM and the rationale for air-monitoring processes are researched and confirmed.
		1.6	***Accreditation framework*** and roles and responsibilities of personnel involved are identified and understood.
		1.7	Processes used in the ***compliant removal*** of friable and non-friable asbestos using enclosures and leak testing, decontamination units, airline respirators and negative pressure equipment are identified and understood.

		1.8	***Work-site documentation*** is collected, reviewed and used to inform the planning process.
		1.9	***Areas within the work site*** where measurements are to be taken are defined.
		1.10	Measuring equipment specific to the hazard and condition of the ACM, the environment, the activities being carried out and level of risk is selected.
		1.11	Limits of own expertise and available equipment are recognised and expert advice and equipment sought as appropriate.
		1.12	Equipment, including ***personal protective equipment*** (PPE), required to carry out the job is identified and sourced.
		1.13	Planning is documented and confirmed with the client, asbestos removalist and supervisor.
2	Prepare to collect site measurements and other data.	2.1	Arrangements are made with work site to collect information and data, including advising those involved of requirements to facilitate the measurement and monitoring process.
		2.2	Site visit is conducted and a visual inspection is completed according to legislation, regulations, code of practice and standards.
		2.3	Effective ***air monitor locations*** for each asbestos removal task are identified and recorded.
		2.4	Sampling process is defined according to the standards specified for ***membrane filter method*** for estimating airborne asbestos fibres and in consultation with relevant site personnel.
		2.5	Sampling schedule and ***strategy*** are defined after site inspection and in consultation with asbestos removalist and work site manager or supervisor.
		2.6	Air-monitoring program consisting of locations and schedule is developed and provided to asbestos removalist and supervisor.
		2.7	***Operability*** of monitoring equipment is checked according to manufacturer specifications, organisational

			procedures and professional standards.
3	Use measuring devices to collect site information and data.	3.1	Air-monitoring ***equipment*** is selected, ***calibration records are checked***, equipment is calibrated and appropriate flow rate is determined according to accredited laboratory requirements and professional standards.
		3.2	***Equipment*** is used and maintained correctly to accurately collect data.
		3.3	Workplace safety procedures are followed during the collection process.
		3.4	Required volumes of samples are collected with minimum damage and disruption to the fabric, according to the membrane filter method, labelled and the filter holders replaced according to the sampling schedule and plan.
		3.5	***Information and data are collected*** and results recorded noting where samples were taken and ensuring compliance with chain of custody protocols.
		3.6	Processes are put into place and checks made to ensure all data is collected under the control of a NATA or other accredited laboratory and according to industry standards and legislative requirements.
		3.7	Equipment is dismantled, decontaminated and parts or equipment disposed of according to regulations, code of practice and workplace procedures.
		3.8	Equipment is stored correctly or made ready for re-use.
		3.9	Sampling equipment is serviced and maintained according to professional standards and manufacturer specifications.
4	Complete the monitoring process.	4.1	Filter is labelled and prepared for despatch to the laboratory, ensuring correct handling procedures for filters and chain of custody requirements.
		4.2	Confirmation of the exact nature of fibres is sought where necessary.

		4.3	Samples are retained and stored in labelled containers.
		4.4	Site set-up, removal, breakdown and decontamination procedures are overseen according to legislative and code of practice requirements.
		4.5	Documentation and processes to ensure the compliant transportation of samples are implemented.
5	Evaluate and document results of monitoring process according to accredited laboratory requirements.	5.1	Results received from the NATA or other accredited laboratory are interpreted and evaluated against the recognised standard.
		5.2	Further calculations are performed as required on the technical data received from the NATA or other accredited laboratory.
		5.3	Outcomes from the technical analysis are documented.
		5.4	Concise, logical and accurate ***report*** is prepared that addresses regulatory requirements and is in the form required by ***audience***.
		5.5	Work site is visually inspected to ensure compliance with procedures prior to issuing a clearance certificate.
		5.6	Clearance certificate is completed according to legislative, regulatory and code of practice requirements.
		5.7	Recommendations are made regarding exposure and control monitoring processes.
		5.8	Results and records are retained and stored in a readily retrievable format according to regulatory requirements and standards.

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
  - prepare documentation (including air-monitoring report) that is accurate, clear and complete
  - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
  - follow and give instructions
  - liaise with related professionals, including facility managers, building owners, building surveyors and testing authorities
  - manage conflict between internal and external stakeholders
  - read and interpret:
    - complex testing results and reports from NATA or other accredited laboratories
    - documentation from a variety of sources
    - drawings and specifications
  - use language and concepts appropriate to cultural differences
- initiative and enterprise skills to identify and report faults in tools, equipment and materials
- planning and organising skills to plan and set out work
- teamwork skills to:
  - coordinate own work
  - liaise with workplaces
  - supervise the work of others
  - 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 respond effectively to timelines, deadlines and complex work requirements
  - check and evaluate the asbestos removal area according to the safe work method
  - use, fit and maintain PPE, decontamination equipment, hand and power tools safely
  - apply general WHS requirements for work in the construction industry
  - apply safe work methods for the removal of testing samples of friable and non-friable asbestos
  - apply inspection, sample collection, testing, evaluation and reporting techniques and protocols that comply with NATA and other accredited laboratory requirements and

professional standards
- apply chain of custody protocols that comply with NATA and other accredited laboratory requirements and professional standards
- follow correct decontamination procedures

Required knowledge

- range of materials manufactured using asbestos, the type and characteristics of asbestos used in each material, and 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
- requirements of current legislation and standards relating to asbestos safety, the preparation of an asbestos removal control plan (ARCP), and issuance of air-monitoring clearance certificates and related documentation, including:
  - understanding the trigger points for stopping work
  - detailed knowledge of the membrane filter method
  - detailed understanding of the clearance certificate
- rationale for, and principles underpinning, the ARCP, air monitoring and related legislation
- requirements for professional indemnity and other insurances required by legislation and to mitigate business risk
- air-monitoring procedures and testing requirements, including interpretation of results
- asbestos removal methodologies and work practices for both friable and non-friable asbestos
- general WHS procedures for construction work
- health hazards associated with friable ACM and circumstances that may change the nature of ACM from non-friable to friable, such as:
  - weathering
  - wear and tear
  - application of tools and equipment
  - accidental damage
- safe work methods for the removal of friable and non-friable asbestos
- hazards associated with using enclosures and removing friable and non-friable asbestos
- 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
- plans, drawings and specifications, asbestos registers and register amendments

- quality requirements relating to asbestos assessment associated with removal
- risk assessment processes and contingency planning relating to asbestos assessment associated with removal
- scientific techniques for measuring, testing and evaluating air-monitoring results and reports, including:
  - principles of fibre counting
  - analysis of bulk samples
- techniques associated with containing and removing asbestos, including:
  - use of large and small-scale enclosures for different sites
  - use of negative pressure exhaust units
  - encapsulation methods
  - use of decontamination unit
- testing methodologies (in particular air monitoring) and protocols associated with the sampling process, handling, gathering and transport of ACM
- types, characteristics, uses and limitations of plant and equipment involved in enclosing and removing asbestos
- workplace and equipment safety requirements
- documentation required for clearance inspections following application of rigorous professional assessment and using specified wording defined in regulations

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: • plan for the asbestos removal assessment process by ensuring access to required documentation and consultation with the client and workplace • interpret and apply the requirements of relevant legislation, regulations, codes of practice and standards to ensure the safe and correct assessment of the removal of ACM • demonstrate understanding of the scientific and technical principles that underpin the ACM removal assessment process • undertake preparations for collecting samples, including identification of sampling areas, the sampling process, sampling schedule, air-monitoring plan and strategy • collect samples from site and handle in a manner that ensures the integrity of the sample, including use of protocols for the chain of custody • prepare samples for analysis and transporting to a NATA or other accredited laboratory • interpret and analyse laboratory results • conduct site inspections, prepare advice to clients and provide clearance certification.
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.

Type of asbestos containing materials (both friable and non-friable) may include: **Note:** • Non-friable asbestos is also known as bonded asbestos • ACM notionally listed as non-friable may become friable due to weathering or damage	• acoustic plaster soundproofing • adhesives and glues • asbestos cement • asbestos cement moulded guttering • asbestos cement sheets • asbestos tiles • bitumastic felts and materials • compressed asbestos cement panels • floor vinyl covering • gaskets • mortar • pipe lagging • woven textiles, ropes, tapes and braids • decorative coatings • resinous backing board • sealant mastic • sprayed on fireproofing, soundproofing and thermal insulation • tape • thermal insulation.
Legislation, regulations, code of practice and standards may include:	• asbestos WHS legislation, regulations and codes of practice, including those relating to asbestos fibre hazards • exposure standards for atmospheric contaminants in occupational environments • guidance material, such as guidance notes, guides, fact sheets, model regulations and technical reports that provide practical guidance and direction for hazard control • national Safe Work Australia codes • Australian standards • biological exposure indices.
Independent assessment is a:	• requirement that is achieved by the licensed asbestos removalist and asbestos assessor being contracted independently to the client or project manager in order to avoid conflicts of interest.

Characteristic and health impacts of exposure to ACM include:	• range of diseases • how it is absorbed into the body • how it affects specific parts of the body, such as extent of damage to tissue • dose factors relating to concentration and time.
Accreditation framework must include:	• role of NATA and other accredited laboratories • accreditation processes • accreditation status of the assessor • requirements for sampling, testing and reporting for planning purposes • role relationships with and of the accredited assessor.

Compliant removal of asbestos by specialist removalists requires application of methodologies and processes, including:	• decontamination of:
	  • worker
	  • tools and equipment
	  • work area and work site
	• installation, use and disassembly of decontamination units
	• leak test enclosures
	• use, maintenance and construction of enclosures
	• use of:
	  • ARCP
	  • negative air extraction units
	  • PPE.

Work-site documentation may include:	• ARCP • building plans and specifications • building surveys.
Areas within the work site where measurements are to be collected are determined by factors, including:	• area or space available • location of removal work area or work site • movements of people and equipment • number of persons occupying area • physical features of equipment, such as emitting sources • tasks or activities being undertaken • type, quantity and location of asbestos in buildings and other sites • waste disposal pathways.

Personal protective equipment used in the monitoring process may include:	• protective clothing, such as:
	  • disposable coveralls with fitted hood and cuffs
	  • safety footwear (pull-on, not lace-up)
	  • disposable or protective gloves
	• respiratory protection class appropriate to the type of asbestos to be removed, which may be P1, P2 or P3
	• correct face fitting and use of respiratory protective equipment

	• spare sets of PPE.

Air monitor locations may include:	• before asbestos removal activities inside asbestos removal areas
	• during asbestos removal activities:
	  • areas adjacent to and above and below asbestos removal site
	  • areas of high occupancy in the locality
	  • for removal of friable asbestos:
	  • area near (but not directly behind) negative air exhaust
	  • clean decontamination area
	  • area where underclothes are laundered
	• after asbestos removal and final cleaning inside the contained work area and work site.

Membrane filter method must conform to the:	• requirements of the current edition of the NOHSC Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres.
Strategy for sampling may include consideration of:	• accessibility and other practical considerations • bulk sampling analysis • fibre counting • frequency of exposure • location of nearby sensitive receptors • size of the workforce (i.e. individual worker or groups of workers) • work shift times.
Operability of equipment checks may include:	• battery serviceability • accuracy of calibrated devices • availability of appropriate attachments, leads, filters, etc. • pump fault lights • rejection criteria for flow rate fluctuations • pump back pressure tests • ensuring equipment is NATA or other accredited laboratory tested and certified, with certificate of currency as appropriate.
Equipment may include:	• air-monitoring stands • air monitors • battery charges • field sheets • filter cassettes • rotameters • screwdrivers • stopwatches • tubing.

Calibration records are checked for equipment, including:	• pumps • rotameters • stopwatches.
Equipment:	• is used according to manufacturer specification and professional guidelines • entails processes that include checking the time and flow rate at the start and end of the sample collection period.
Information and data are collected and may include:	• conditions, such as activities and number of people present when measurements were made • date, time and duration of collection • locations where information and data were collected • readouts and measurements taken • required field blanks • sampling method, such as grab, longitudinal or continuous • specifications of equipment used.

Report containing required information and data may be required for or contain:	• exposure monitoring for the purpose of determining the PPE required
	• control and clearance air-monitoring report
	• where, when and why measurements were taken
	• sampling process:
	  • how measurements were taken
	  • specifications of equipment used
	  • locations where samples were taken
	  • conditions at time of sampling, including whether the sampling period represented normal operating conditions
	• table of results
	• interpretation and discussion of results
	• evaluation of results with reference to appropriate standards
	• completion of the clearance certificate
	• areas not accessed.

Audience for the report may include:	• client • NATA or other accredited laboratory staff • neighbours • occupiers of site • owners and managers • principal/managing contractors • removalists • supervisors • WHS committee or WHS representatives • WHS regulatory bodies.

Unit Sector(s)

Construction

Custom Content Section

Not applicable.