



THE UNIVERSITY
of ADELAIDE



Infrastructure

Asbestos Management Plan

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Introduction

The University of Adelaide (UoA) was established in 1874 with the first building, the Mitchell building, completed in 1882, since then the UoA portfolio has increased significantly through to the current day. Buildings throughout our campuses built prior to 1990 are likely to or could contain asbestos either through the construction or refurbishment of buildings or in items of plant.

The UoA is committed to protecting staff, students, contractors and members of the public from exposure to Asbestos Containing Material (ACM) and fibres. This Asbestos Management Plan (AMP) has been developed to provide information and processes for the safe management of asbestos in accordance with legislative and UoA HSW requirements as outlined in the UoA Asbestos Management HSW Handbook.

This plan includes processes for:

- The identification of asbestos or ACM
- Safe work procedures and control measures
- Management of incidents and emergencies involving asbestos or ACM
- Consultation, information and training
- Roles and Responsibilities
- Review of the AMP

This plan also makes provision for the instances of identifying suspected ACM arising from construction site activities, maintenance and operating activities. Through the sustainment of the AMP and Asbestos Register, the UoA aims to proactively identify, analyse and manage asbestos.

It is the intention of the UoA, as far as reasonably practicable, to eradicate asbestos and ACM contained within the UoA estate of buildings. In every circumstance involving the disturbance or removal of asbestos and ACM, it is essential that only UoA inducted and SafeWork SA licensed asbestos removalists undertake the work in accordance with the Asbestos Management HSW Handbook and the [Contractor Safety Management HSW Handbook Chapter](#).

Identification

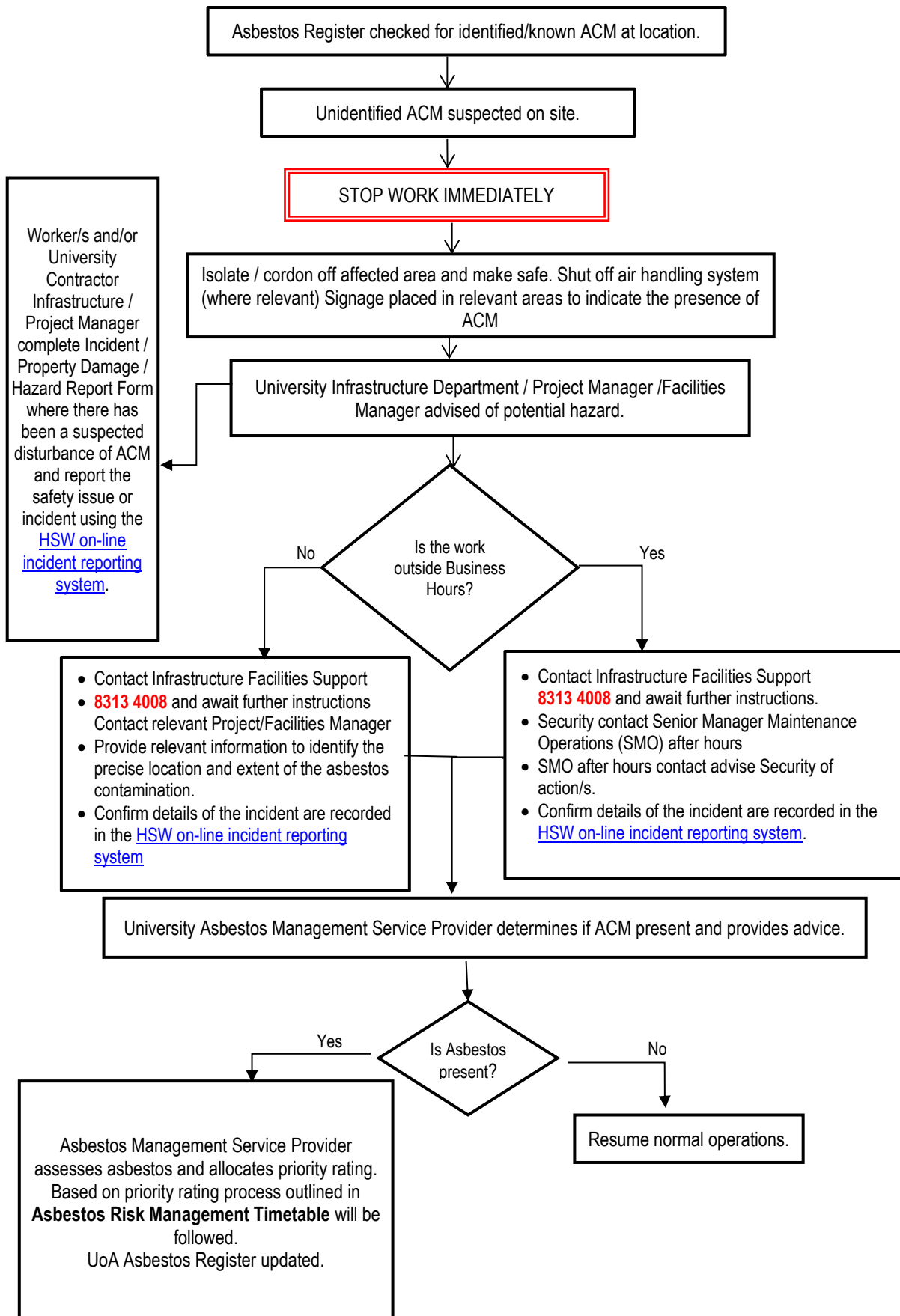
The UoA engages Asbestos Consultants to inspect the UoA estate to determine the presence of asbestos or ACM and to provide findings pertaining to type, condition and extent of the ACM recorded.

Where instances of suspected ACM are reported or identified that have not been previously recorded, then a competent person is to be engaged to take a sample and arrange for the sample to be tested by a NATA accredited organisation. Refer to Process Flow Discovery of Suspected Asbestos Containing Material (ACM) for further details. Areas that cannot be accessed during normal daily or routine maintenance activities, or that have not been previously tested, but are suspected to contain asbestos or ACM, must be assumed to contain asbestos until a sample has confirmed or eliminated the presence of asbestos or ACM.

Prior to a competent person accessing an area for the purpose of testing for asbestos fibres, a Permission to Work must be completed by the person conducting the sampling for approval by a UoA representative. An Asbestos Sample Log must be completed for all samples taken for the purpose of testing for asbestos fibres.

All asbestos and ACM is to be labelled or signed in accordance with legislative requirements. Any damaged labels or signs are to be reported to Infrastructure Branch - Facilities or phone 83134008 so that they can be reinstated.

Discovery of Suspected Asbestos Containing Material (ACM) Process Flow



Emergency Procedure

Accidental Damage or Discovery of New Asbestos Containing Materials (ACM)

If an uncontrolled situation or incident occurs where known or suspect asbestos containing material is disturbed or there are other possible asbestos related issues the following steps are to be followed:

STEP	WHO	ACTION	Notification Requirement
1. Stop work immediately	Worker (or others) discover or suspect ACM has been damaged or new item identified	Stop work immediately. Go to Step 2	Infrastructure Compliance enter into the HSW Incident Management System.
2. Restrict access to affected area. Shut off air-handling system (where relevant)	Contractor or worker supervisor	Restrict access to the area by closing doors, taping off access points and installing temporary signage to prevent site occupants or members of the public from entering the immediate area, and to prevent any further disturbance of asbestos materials in the area. Document names of any other known persons who may have been exposed. Go to Step 3	
3. Notify the Project Manager/Facilities Manager/Management Plan Controller	Contractor or worker, supervisor	Notify the Asbestos Management Plan (AMP) Controller: Email: Facilities Support Phone 83134008 Go to step 4	
4. Implement Incident Notification Process	Facilities Manager/Project Manager/AMP Controller/Supervisor or person in control of the area or activity	Go to step 5	Report the safety issue or incident using the HSW on-line incident reporting system . (this is only necessary for accidental damage or discovery)
5. Notify Licensed Asbestos Assessor	Facilities Manager/Project Manager/AMP Controller	Licensed Asbestos Assessor (LAA) to arrange permit to work so testing can take place. Go to step 6	

STEP	WHO	ACTION	Notification Requirement
6. Sample material	Licensed Asbestos Assessor	<p>LAA to attend site to take sample of suspected asbestos materials.</p> <p>Notify Facilities Manager/Project Manager/AMP Controller and the HSW team of the result.</p> <p>Assess Asbestos and allocate a priority as per risk criteria.</p> <p>Go to step 7</p>	
7. If it is a notifiable incident to SafeWork SA, the incident scene to be undisturbed until clearance is provided by SWSA. Notify SafeWork SA	<p>Supervisor or person in control of the area to notify Infrastructure.</p> <p>Infrastructure to notify HSW Central</p> <p>HSW Central to notify SafeWork SA</p>	<p>Co-ordinate corrective actions to eliminate the risk (where required) in consultation with relevant staff.</p> <p>Update the University's central Asbestos Register.</p>	Supervisor
8. Engage licenced asbestos removal contractor for clean-up	Facilities Manager/Project Manager/AMP Controller	<p>Facilities Manager/Project Manager/AMP Controller to engage a licensed asbestos removal contractor to undertake asbestos cleanup and decontamination works.</p> <p>Go to step 9</p>	
9. Licenced asbestos removal contractor submits work permit for removal of asbestos	Contractor	<p>Permit reviewed by Infrastructure Facilities Manager/Project Manager and HSW Compliance Officer.</p> <p>Go to step 10</p>	
10. Licenced Asbestos Contractor removes Asbestos	Contractor	<p>Removal of Asbestos by licensed contractor.</p> <p>Go to step 11</p>	

STEP	WHO	ACTION	Notification Requirement
11. Update Asbestos Register and archive documents	Asbestos Consultant/ Facilities Manager/Project Manager/AMP Controller	As required, update site Asbestos Register as soon as practicable Facilities Manager/Project Manager/AMP Controller to archive incident documents	

Asbestos Registers

Once identified, ACM is to be documented and included in the UoA Asbestos Registers which are available to anyone who conducts or plans to conduct work at the UoA. Any person working in a UoA estate should review the register and all contractors carrying out work for the UoA must review the register prior to conducting the work.

Registers

Archive

Waite Campus

Thebarton Campus

North Terrace

West Beach

Roseworthy Campus

North Adelaide

Buckland Park

In the event a building does not appear in the Asbestos registers, contractor/consultant to contact Facilities Support.

The registers are reviewed by the UoA Asbestos Consultant annually. The annual review surveys are a combination of first-time visual inspections to identify suspect ACM and visual re-inspections of identified and presumed ACM found in earlier surveys. Any new sources of ACM that are identified are to be included on the register. ACM that has been removed shall also be identified on the register and all documentation is to be maintained inclusive of clearance certificates by the Infrastructure Branch.

Risk Management

Rating the Risk of Asbestos Containing Materials

The presence of asbestos containing materials (ACMs) does not necessarily constitute an exposure risk.

If the ACM is disturbed to cause the release of airborne respirable fibres, then an exposure risk may be posed. The assessment of the exposure risk by ACMs assesses (a) the material condition and friability, and (b) the likelihood of disturbance.

Material Condition

The assessment factors for material condition include:

- Evidence of physical deterioration and/or water damage.
- Degree of friability of the ACM.
- Surface treatment, lining or coating (if present).
- Likelihood to sustain damage or deterioration in its current location and state.

Physical Condition and Damage

The condition of the ACM is rated by a Subject Matter Expert as either being high, medium, low or very low risk.

- **High (P1)**- Immediate action should be taken, engage a licensed asbestos removal contractor. In the interim restrict access.
- **Medium (P2)** – Removal/encapsulation of materials with minor damage required. Increased frequency of inspections required for damaged materials or items in good condition in high traffic areas.
- **Low (P3)** – Materials should be identified, and warning labels affixed. Minor repairs or removal may be required in some situations.
- **Very Low (P4)** - Materials should be identified, and warning labels affixed. Minor repairs or removal may be required in some situations.

Friability and Surface Treatment

The degree of friability of ACMs describes the ease of which the material can be crumbled, and hence to release fibres, and takes into account surface treatment.

Friable asbestos

Friable asbestos or ACM is asbestos or ACM in powder form, or able to be crumbled, pulverised, or reduced to a powder by hand pressure when it is dry e.g. sprayed asbestos beam insulation (limpet), pipe lagging.

Non-friable asbestos

Also referred to as bonded asbestos, typically comprises asbestos fibres tightly bound in a stable non- asbestos matrix or impregnated with a coating. Examples of non-friable asbestos products include asbestos cement materials (sheeting, pipes etc.), asbestos containing vinyl floor tiles, compressed gaskets and electrical backing boards.

Disturbance Potential

In order to assess the disturbance potential, the following factors are considered:

- Requirement for access for either building work or maintenance operations.
- Likelihood and frequency of disturbance of the ACM.
- Accessibility of the ACM.
- Proximity of the ACM to air plenums and direct air stream.
- Quantity and exposed surface areas of ACM.
- Normal use and activity in area, and numbers of persons in vicinity of ACM.

These factors are used to determine

- the potential for fibre generation, and
- the potential for exposure to person/s, as a rating of low, medium or high disturbance potential.

Risk Status

The risk factors described previously are used to rank the asbestos exposure risk posed by the presence of the ACM.

- A low risk rating describes ACMs that pose a low exposure risk to personnel, employees and the general public providing they stay in a stable condition, for example asbestos materials that are in good condition and have low accessibility.
- A medium risk rating applies to ACMs that pose an increased exposure risk to people in the area.
- A high-risk rating applies to ACMs that pose a higher exposure risk to personnel or the public in the vicinity of the material due to their condition or disturbance potential.

The following priority rating system is adopted to assist in the programming and budgeting for the control of asbestos risk identified in the assessment.

Priority 1 (P1)	Action:	Restrict Access to Area & Organise Abatement Works as soon as practicable & manage any remaining materials
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Area has ACMs, which are either damaged or are being exposed via continual disturbance. As an interim, immediately restrict access.

Priority 2 (P2)	Action:	Organise Remedial Works as soon as practicable & manage any remaining materials.
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Area has ACMs with a potential for disturbance due to the following conditions:

1. Material has been disturbed or damaged and its current condition, while not posing an immediate hazard, is unstable.
2. The material is accessible and when disturbed, can present a short-term exposure risk.
3. Demolition, renovation, refurbishment, maintenance, modification or new installations, involving air-handling systems, ceilings, lighting, fire safety systems or floor layout.
4. As an interim, immediately restrict access.

Area has ACMs, where:

Priority 3 (P3)	Action:	No Short-Term Remedial Works Required Review periodically.
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1. The condition of friable / non friable ACMs is currently stable and has low potential of being disturbed.
2. The ACM is currently in a non-friable form, may have slight damage, but does not present an exposure risk unless cut, drilled, sanded or otherwise abraded.

This presents a low risk of exposure where the materials are left undisturbed under the control of this Asbestos Management Plan (AMP). Defer any major action unless materials are to be disturbed as a result of maintenance, refurbishment or demolition operations.

Priority 4 (P4)	Action:	No Short-Term Remedial Works Required Review periodically.
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Area has ACMs in a non-friable form and in good condition. It is unlikely that the material can be disturbed under normal circumstances and can be safely subjected to normal traffic. Even if it were subjected to minor disturbance the material poses a negligible health risk.

These materials must be removed prior to renovations that may impact on the materials.

Plan for Removal of Asbestos Containing Materials

Once a priority rating has been assigned to each ACM the material should be managed in accordance with the timetable provided in Table 2. This timetable details the action required and time scale for completion.

ACM's identified as presenting an elevated risk should be removed in accordance with Table 2, or earlier if appropriate. When ACM's have been removed from a site, it is a requirement under the SA WHS regulations that the asbestos register and AMP are revised and updated accordingly.

TABLE 2: Asbestos Risk Management Timetable

Time Frame		Less 12 months	12 to 36 months where possible	>36 months where possible	Comments
Priority Rating	P1	Immediate Removal Update Register as soon as practicable.			
	P2	Plan for Removal Put Controls in Place	Update Register as soon as practicable. Removal where possible		Eg Remove where it aligns with significant refurbishment projects
	P3	Put Controls in Place Leave and manage	Update Register as soon as practicable. Plan for Removal where possible	Update Register Removal where possible	

	P4	Leave and manage	Update Register as soon as practicable. Plan for Removal where possible	Update Register Removal where possible	
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Removal

The UoA through the Permission to work permit process ensures as much as reasonably possible that all Asbestos removed will be performed by suitably licensed organisations and trained / qualified workers.

Contractors

When asbestos testing, removal or disturbance work is being carried out at a UoA workplace, A permission to [work](#) permit must be submitted and issued prior to work commencing.

Consultation and Communication

Prior to any asbestos removal or disturbance work being carried out at the UoA, the licensed asbestos removalist must provide adequate notification to the UoA Representative which allows for further timely communication to UoA key stakeholders.

The UoA Infrastructure Representative must then ensure that following persons are told that the asbestos removal work is to be carried out and when the work is to commence:

- > Applicable School/Faculty/Division Manager and Infrastructure Representative so that they in turn can communicate to relevant staff and students;
- > Building tenants;
- > Infrastructure Branch;
- > Security Office;

Clearance Certificates

Friable asbestos removal (Class A asbestos removal work) requires a licensed assessor to undertake the clearance inspection and issue the clearance certificate. Non-friable asbestos removal work (Class B asbestos removal work) requires a competent person to undertake the clearance inspection and issue the clearance certificate. Clearance certificates are to provide the following detail:

- Date and time of the inspection;
- The exact location of the removal area including building, level and room numbers;
- The work that was undertaken and any limitations; and
- Name, contact details and signature of the authorised assessor.

Incidents

Incidents relating to the exposure of airborne asbestos fibres are to be reported to the UoA Infrastructure Branch representative, reported in the University's online incident reporting system and investigated in accordance with [HSW Reporting and Investigation Procedure](#).

Any workers exposed to asbestos fibres are to be informed of the ability to voluntarily register on the National Asbestos Exposure Register.

[National Asbestos Exposure Register | Asbestos and Silica Safety and Eradication Agency \(asbestossafety.gov.au\)](#)

Records Management

Upon completion of work the responsible contractor is to provide to the UoA representative and ARCP Issuer with the following:

- > Clearance Certificate;
- > Photos (prior to commencement and following completion of removal);
- > Detailed plan documenting type and location of ACM removed; and
- > Closed and signed Permission to work Permit and ARCP.

The ARCP Issuer is required to provide all documentation to Infrastructure Branch within 5 days to ensure accurate and timely maintenance of asbestos registers and to record the documents in the UoA Records Management system.

All documentation relating to the exposure of asbestos fibres to a worker is to be maintained for 40 years in the UoA records management system.

Responsibilities

<p>Director, Capital Projects & Facilities Management Infrastructure Branch Division of University Operations</p>	<ul style="list-style-type: none"> > Manage the UoA asbestos content in building fabric, infrastructure and major (fixed) plant via operational processes. > Ensure that information pertaining to asbestos is available to persons who may be working with or adjacent to asbestos e.g. asbestos register. > Arrange for a competent person to maintain and conduct a review of the UoA central register on an annual basis and update the register on an ongoing basis when asbestos is identified or removed. > Ensure that only licenced asbestos removalists are used to remove asbestos. > Provide appropriate training for staff who are authorised to issue ARCP.
<p>Facilities Manager/Project Manager/AMP Controller/Supervisor/Permit Issuer or person in control of the area</p>	<ul style="list-style-type: none"> > Ensure a risk assessment/safe work method statements (SWMS) has been conducted in accordance with the Hazard Management process by a competent person and appropriate control measures are recorded and in place to eliminate exposure. > Maintain any training records i.e. staff authorised to issue asbestos work permits and asbestos awareness training. > Report any safety issues or incidents using the HSW on-line incident reporting system. > Notify the HSW Senior Advisor when exposure to asbestos is confirmed.
<p>Infrastructure Branch Division of University Operations</p>	<ul style="list-style-type: none"> > Keep detailed records relating to the removal or disturbance of asbestos including ARCP, clearance and disposal certificates on the UoA records management system.
<p>Asbestos Consultant</p>	<ul style="list-style-type: none"> > Review the Asbestos register and update yearly. > Maintain the online Asbestos register. > Comply with contractual agreements.

Permit Issuers	<ul style="list-style-type: none"> > Issue permission to work permits and register in accordance with UoA and legislative records management procedures. > Review all documentation prior to issuing asbestos removal or sampling permit
Staff	<ul style="list-style-type: none"> > Comply with the requirements of this AMP. > Report any asbestos related incidents in UniSafe.
Contractors/Workers	<ul style="list-style-type: none"> > Comply with the requirements of this AMP and UoA permit/permission to work procedures. > Report any asbestos related incidents to the Compliance Officer who will report the incident in the on-line HSW reporting system. > Ensure workers have the required competencies to undertake asbestos related work. > Develop an ARCP for any removal or disturbance work.

Definitions

Airborne asbestos means any fibres of asbestos small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable fibres are counted.

Asbestos means the asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals, including actinolite asbestos, grunerite (or Amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), Crocidolite asbestos (blue) and tremolite asbestos.

Asbestos containing material (ACM) means any material or thing that, as part of its design, contains asbestos.

Asbestos-contaminated dust or debris (ACD) means dust or debris that has settled within a workplace and is (or assumed to be) contaminated with asbestos.

Asbestos related work means work involving asbestos (other than asbestos removal work to which Part 8.7 of the WHS Regulations applies) that is permitted under the exceptions set out in regulation 419(3), (4) and (5).

Asbestos removalist means a person conducting a business or undertaking who carries out asbestos removal work.

Asbestos removal work means:

- > Work involving the removal of asbestos or ACM
- > Class A asbestos removal work or Class B asbestos removal work as outlined in Part 8.10 of the WHS Regulations

Asbestos work area means an immediate area in which work on ACM is taking place. The boundaries of the asbestos work area must be determined by a risk assessment.

Competent person means a person who has acquired, through training, qualification or experience, the knowledge and skills to carry out the task.

Exposure standard for asbestos is respirable fibre level of 0.1 fibres/ml of air measured in a person's breathing zone and expressed as a time weighted average fibre concentration calculated over an eight-hour working day and measured over a minimum period of four hours in accordance with:

- > The Membrane Filter Method
- > A method determined by the relevant regulator.

Friable asbestos means material that is in a powder form or that can be crumbled, pulverised or reduced to a powder by hand pressure when dry, and contains asbestos.

NATA-accredited laboratory means a testing laboratory accredited by the National Association of Testing Authorities (NATA), Australia, or recognised by NATA either solely or with someone else.

Non-friable asbestos means material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.

Permit Issuer means the UoA staff member authorised to issue the ARCP.

Personal Protective Equipment (PPE) means equipment and clothing that is used or worn by a worker to protect themselves against or minimise their exposure to workplace risks.

Respirable asbestos means an asbestos fibre that:

- > is less than 3 microns (μm) wide
- > is more than 5 microns (μm) long
- > has a length to width ratio of more than 3:1.

Document Control Record

Action	Date	Asbestos Consultant	Management Plan Controller
Sample draft Asbestos Management Plan presented to University for discussion and comment.	14/02/2012	Keith Mitchell, Carters Asbestos Management	Tony Reynolds, Campus Services, The University of Adelaide
Draft Asbestos Management Plan presented to University for discussion and comment. Updated by University.	02/01/2013	Keith Mitchell, Carters Asbestos Management	Tony Reynolds, Campus Services, The University of Adelaide
Updated final draft Asbestos Management Plan agreed with Campus Services	18/03/2013	Keith Mitchell, Carters Asbestos Management	Tony Reynolds, Campus Services, The University of Adelaide
Plan updated by Campus Services HSW Operations Consultant and Capital Projects Risk and OH&S Advisor.	12/10/2015	Keith Mitchell, Carters Asbestos Management	Tony Reynolds, Campus Services, The University of Adelaide
Reference and formatting of Appendices updated by Campus Services HSW Operations Consultant	29/08/2016	Keith Mitchell, Carters Asbestos Management	Tony Reynolds, Campus Services, The University of Adelaide
Update to duty holder titles and Asbestos Register section by Campus Services HSW Operations Consultant	09/05/2017	Keith Mitchell, Carters Asbestos Management	Tony Reynolds, Operations Manager, Service Delivery, The University of Adelaide
Update to duty holder titles and Asbestos Register section.	5/08/2024	HSW Central HSW Infrastructure	Kon Corolis Director, Capital Projects & Facilities Management Infrastructure Branch

References

Work Health and Safety Act 2012 (SA)

Work Health and Safety Regulations 2012 (SA)

How to Manage and Control Asbestos in the Workplace Code of Practice

How to Safely Remove Asbestos Code of Practice

University Internal WHS System

UoA Health, Safety and Wellbeing Handbook Chapters

PRO 3.1-07 Permit/Permission to Work